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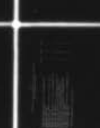
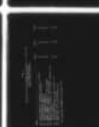
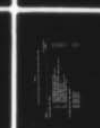
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MISSILE ELECTRONIC EQUIPMENT SPECIALIST, G AND H SHREDS, MISSIL--ETC(U)  
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**OCCUPATIONAL SURVEY REPORT**



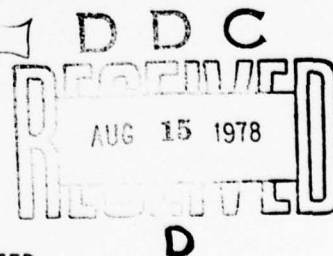
MISSILE ELECTRONIC EQUIPMENT SPECIALIST, G AND H  
SHREDS, MISSILE SYSTEMS ANALYST, G SHRED  
CAREER LADDER.  
AFSCs 31630G, 31650G, 31670G, 31632G/H, 31652G/H,  
31672G/H, and 31693.

AFPT-90-316-261

JUNE 1978

OCCUPATIONAL SURVEY BRANCH  
USAF OCCUPATIONAL MEASUREMENT CENTER  
LACKLAND AFB TEXAS 78236

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## PREFACE

This report presents the results of a detailed Air Force Occupational Survey of the following three Air Force Specialties (AFSSs) in the Minuteman Missile Electronic Equipment career field: AFS 316X0G, Missile Systems Analyst, WS-133AM/CDB; AFS 316X2G, Missile Electronic Equipment Specialist, WS-133A, WS-133A/M; and AFS 316X2H, Missile Electronic Equipment Specialist, WS-133B. This project was directed by USAF Program Technical Training, Volume 1, dated January 1976. Authority for conducting occupational surveys is contained in AFR 35-2. Computer outputs from which this report was produced are available for use by operating and training officials.

The survey instrument was developed by Captain David S. Street, Inventory Development Specialist. Major William A. Tamashunas analyzed the survey data. First Lieutenant Michael J. Kelley, Major William A. Tamashunas, and Mr. James B. Keeth wrote the final report. This report has been reviewed and approved by Lt Col Jimmy L. Mitchell, Chief, Airman Career Ladders Analysis Section, Occupational Survey Branch, USAF Occupational Measurement Center, Lackland AFB, Texas, 78236.

Computer programs for analyzing the occupational data were designed by Dr. Raymond E. Christal, Occupational and Manpower Research Division, Air Force Human Resources Laboratory (AFHRL), and were written by the Project Analysis and Programming Branch, Computational Sciences Division, AFHRL.

Copies of this report are available to air staff agencies, major commands, and other interested training and management personnel upon request to the USAF Occupational Measurement Center, attention of the Chief, Occupational Survey Branch (OMY), Lackland AFB, Texas 78236.

This report has been reviewed and is approved.

JAMES A. TURNER, JR., Col, USAF  
Commander  
USAF Occupational Measurement  
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Chief, Occupational Survey Branch  
USAF Occupational Measurement  
Center

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## SUMMARY OF RESULTS

1. Survey Coverage. During the period 8 August 1977 through 24 January 1978, the job inventory was administered to incumbents involved with the Minuteman Missile Electronic Maintenance career ladders. Survey results are based on responses from 827 of the 1,156 incumbents assigned to Air Force Specialties (AFSs) 316X0G, 316X2G, and 316X2H. This represents 72 percent of all AFS 316X0G incumbents; 56 percent of all AFS 316X2G personnel; and 27 percent of all AFS 316X2H specialists assigned.

2. Career Ladder Structure. Eighty-eight percent of the survey respondents grouped into eight functional areas. These areas were defined by specialty, weapon system, missile system, missile wing, and experience level combinations.

3. DAFSC and Specialty Group Analysis. Generally, 5-skill level respondents perform technical tasks, while 7-skill level personnel perform a combination of technical and supervisory tasks. Respondents in each specialty reported performing specialty-specific tasks not commonly performed by personnel in the other specialties surveyed.

4. Data Comparisons With AFR 39-1. The AFR 39-1 Specialty Descriptions for specialties 316X0 and 316X2 covered all major functions performed by Minuteman respondents in specialties 316X0G, 316X2G, and 316X2H. Weapon System designations for the "G" and the "H" suffixes relating to the 316X0 and the 316X2 specialty descriptions appear to need review.

5. Comparison of Present With Previous Surveys. Both surveys of the 316X0G specialty identified similar career ladder structures and related data results. The present survey more specifically and comprehensively defines the jobs performed by 316X2G and 316X2H incumbents.

OCCUPATIONAL SURVEY REPORT  
MINUTEMAN MISSILE ELECTRONIC MAINTENANCE CAREER LADDERS  
(AFSCs 316X0G/316X2G/H)

INTRODUCTION

This is a report of an occupational survey of three Air Force Specialties (AFS) in the Minuteman Missile Electronic Maintenance Career Field:

AFS 316X0G-Missile Systems Analyst, WS-133AM/CDB;

AFS 316X2G-Missile Electronic Equipment Specialist, WS-133A,  
WS-133A/M;

AFS 316X2H-Missile Electronic Equipment Specialist, WS-133B.

Incumbents in these specialties perform electronic maintenance on two fundamental missile systems (LGM-30F and LGM-30G) and on equipment which supports four basic weapon systems (WS-133AM, WS-133AM/I, WS-133AM/CDB, and WS-133B/CDB). Previous occupational surveys were published in October 1973 for the Missile Systems Analyst career ladder (AFS 316X0G/H) and in October 1974 for the Missile Electronic Equipment Specialist career ladder (AFS 316X2F/G/H/Q/T).

Since the 1973 and 1974 surveys, the jobs, missile systems, and weapon systems in the 316X0 and 316X2 specialties have changed. The 316X0H specialty was deleted in September 1976 and the personnel and jobs performed by these incumbents have been incorporated into the 316X0G career area. Tasks related to maintaining electrical power, power production, and environmental control systems performed by 316X0G incumbents are now being transferred to 541X0G personnel. The LGM-30B missile system and the WS-133A weapon system are no longer in the operational inventory and existing weapons systems are being modified to accommodate use of the Command Data Buffer (CDB) system.

This survey was conducted to examine the career ladder in light of the changes discussed above. Four major topics will be addressed: (1) development and administration of the survey instrument; (2) the job structure found within the career ladders and how this relates to skill level; (3) comparisons of the job structure with current career ladder documents such as the AFR 39-1 Specialty Descriptions and (4) comparisons of the current findings to both the 1973 and 1974 surveys.

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## INVENTORY DEVELOPMENT AND ADMINISTRATION

The data collection instrument for this occupational survey was USAF Job Inventory AFPT 90-316-261. The task lists from the previous inventories were used as the starting point for developing the new task list. These previous task lists were revised and refined through a thorough research of career field publications and directives, personal interviews with 24 subject matter specialists at three bases (Minot AFB, Malmstrom AFB, and Vandenberg AFB), and written reviews from 66 experienced missile electronic maintenance specialists throughout the Minuteman system. This process resulted in a revised job inventory of 1,375 tasks grouped under 23 duty headings.

During the period August 1977 through January 1978, consolidated base personnel offices in operational units worldwide administered the inventory booklets to airmen holding DAFSCs 316X0G, 316X2G, 316X2H, and 31693. Job incumbents were selected from a computer generated mailing list obtained from personnel data tapes maintained by the Air Force Human Resources Laboratory (AFHRL). Personnel were selected to participate in this survey so as to insure proper representation across all three specialties surveyed. Table 1 reflects the percentage distribution, by major command, of assigned personnel in the three technical specialties. Also reflected is the distribution, by major command, of airmen making up the final survey sample. The 803 incumbents making up the total sample represent 69 percent of the 1,156 members assigned to all three specialties.

Table 2 shows the distribution of the survey sample in terms of DAFSC groups. Table 3 reflects TAFMS distribution of each specialty. Generally, it appears that the survey sample provides adequate representation of MAJCOMS and DAFSCs in the 316X0G and 316X2G specialties. However, due to the low number of 316X2H personnel in the sample (N=10), data on this specialty is presented for information only and these respondents will not be directly discussed in this report.

TABLE 1

## COMMAND REPRESENTATION OF SURVEY SAMPLE

COMMAND	AFS 316X0G		AFS 316X2G		AFS 316X2H	
	PERCENT ASSIGNED	PERCENT SAMPLED	PERCENT ASSIGNED	PERCENT SAMPLED	PERCENT ASSIGNED	PERCENT SAMPLED
SAC	99	97	97	98	95	100
ATC	1	2	3	2	5	0
OTHER	*	*	0	0	0	0
TOTAL	100	100	100	100	100	100
TOTAL 316X0G ASSIGNED	- 1,046		TOTAL 316X2G ASSIGNED	- 73	TOTAL 316X2H ASSIGNED	- 37
TOTAL 316X0G SAMPLED	- 752		TOTAL 316X2G SAMPLED	- 41	TOTAL 316X2H SAMPLED	- 10
PERCENT 316X0G SAMPLED	- 72%		PERCENT 316X2G SAMPLED	- 56%	PERCENT 316X2H SAMPLED	- 27%

\* LESS THAN ONE PERCENT

NOTE: DAFSC 31693 PERSONNEL ARE NOT INCLUDED IN THESE STATISTICS.

TABLE 2

## DAFSC REPRESENTATIONS OF THE SPECIALTY SAMPLES

<u>DAFSC</u>	<u>*PERCENT OF ASSIGNED</u>	<u>PERCENT OF SAMPLE</u>
31630G	10	10
31650G	61	58
31670G	29	32
31632G	7	7
31652G	63	61
31672G	30	32
31632H	8	10
31652H	62	70
31672H	30	20

\* AS OF DEC 1977

NOTE: 9-SKILL LEVEL PERSONNEL SUPERINTEND WORK ACROSS  
FOUR DIFFERENT CAREER LADDERS. THEREFORE,  
SPECIFIC 9-SKILL LEVEL AUTHORIZATIONS ARE NOT  
AVAILABLE FOR EACH LADDER.

TABLE 3  
TAFMS DISTRIBUTION OF SURVEY SAMPLE

MONTHS TIME IN SERVICE	1-48	49-96	97-144	145-192	193-240	241+
NUMBER IN AFS 316X0G SAMPLE	377	171	94	53	36	20
PERCENT OF AFS 316X0G SAMPLE	51%	23%	12%	7%	5%	2%
NUMBER IN AFS 316X2G SAMPLE	18	11	4	5	1	2
PERCENT OF AFS 316X2G SAMPLE	44%	27%	10%	12%	2%	5%
NUMBER IN AFS 316X2H SAMPLE	5	3	2	-	-	-
PERCENT OF AFS 316X2H SAMPLE	50%	30%	20%	-	-	-

## CAREER LADDER STRUCTURE

An essential part of the USAF occupational analysis program is the examination of career ladder personnel in terms of the actual structure of the jobs they perform. This examination is made possible by the Comprehensive Occupational Data Analysis Programs (CODAP) which generate a hierarchical clustering of all jobs performed in the field based upon the similarity of tasks performed and the percent time spent performing these tasks. Background factors such as DAFSC, job title, grade, position, etc. have no bearing on the job clustering process and only are used to help describe the job groups identified.

The basic identifying group used in the hierarchical job structuring analysis is the Job Type. A job type is a group of individuals who perform many of the same tasks and spend similar amounts of time performing them. When there is a substantial degree of similarity between different job types, they are grouped together and labeled as a Cluster. Finally, there are often cases of specialized job types that are too dissimilar to be grouped with any other job types into a cluster. These unique groups are labeled Independent Job Types.

Based on the similarity of tasks performed and time spent performing these tasks, the jobs actually performed in AFS 316X0G, 316X2G, and 316X2H are listed below and illustrated in Figure 1. These major job groups are briefly described below. A more detailed description of representative duties, distinguishing tasks, and common background characteristics for each of these groups is presented in Appendix A. Selected background and job satisfaction data for these groups are presented in Tables 4 and 5.

- I. Electromechanical Team (EMT) Members (N=275)
- II. Site Security Maintenance Team (SSMT) Members (N=69)
- III. Combat Targeting Team (CTT) Members (N=96)
- IV. Technical Engineering and Analysis Technicians (TEATs) (N=16)
- V. AFS 316X2G Missile Electronic Equipment Specialists (N=30)
- VI. AFS 316X2H Missile Electronic Equipment Specialists (N=8)
- VII. Supervision and Support Personnel (N=145)
- VIII. Maintenance Control Personnel (N=83)

Eighty-eight percent of all survey respondents perform jobs that are generally equivalent to those identified in Figure 1. The remaining 12 percent of the sample include members whose jobs cannot be meaningfully identified with these major groups.

## Group Descriptions

I. Electromechanical Team (EMT) Members. The 275 members of this cluster represent 33 percent of the total sample and are the largest cluster identified. More than 50 percent of this group's job time is spent performing tasks related to maintaining WS-133 launch facilities (LFs) and launch control facilities (LCFs), maintaining missile facility electrical power systems, and performing general missile maintenance. The relative percent time spent on any one task by all EMT members is consistently small and tends to indicate that all the EMT's job is functionally very broad.

Within this cluster are several specialized job types whose respondents perform tasks related to LGM-30G and WS-133B/WS-133B/I; LGM-30F and WS-133AM/AM-I; and LGM-30G and WS-133AM/AM-I missile system and weapon system combinations used by the various Minuteman wings. These specialized job types are discussed in Appendix B.

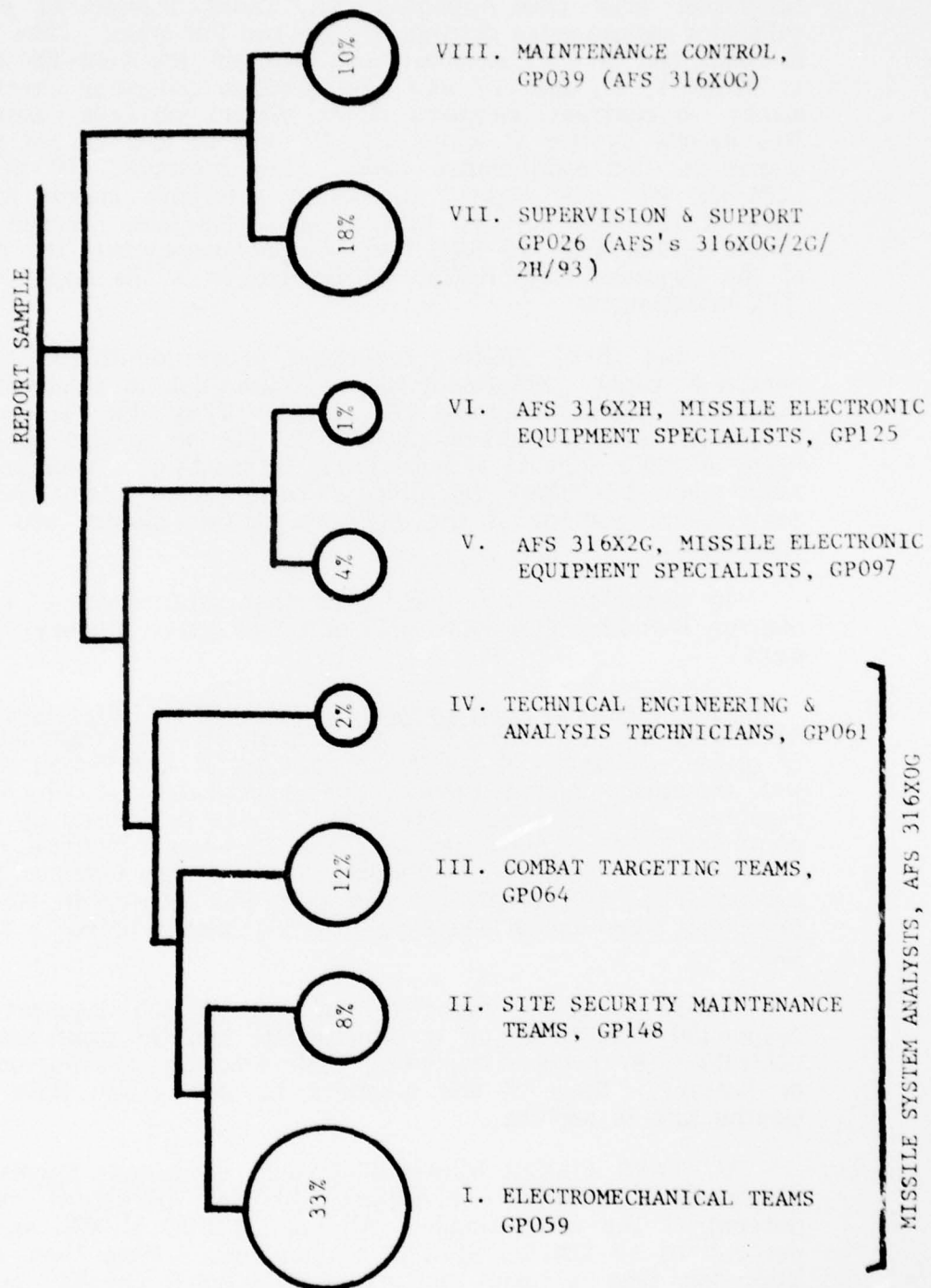
The membership in this large cluster is composed entirely of 316X0G personnel, who represent 37 percent of all 316X0G respondents. Seventy-one percent of the group members have a 5-skill level DAFSC and 68 percent are in their first enlistment. Generally, EMT members reported that their job is interesting and their talents and training are being utilized fairly well or better (See Table 5).

II. Site Security Maintenance Team (SSMT) Members. The 69 respondents in this job type represent eight percent of the survey sample. Forty-seven percent of their job time is spent on tasks related to maintaining WS-133 launch and launch control facilities. Common tasks involve isolating malfunctions to wing-specific inner zone (IZ) and outer zone (OZ) security systems, performing launch facility security systems calibration procedures, and performing security system check out procedures.

As with the previous cluster, membership in this job type is composed entirely of 316X0G personnel and represents nine percent of all DAFSC 316X0G respondents. Eighty percent of the personnel are in their first enlistment. Sixty-one percent of these incumbents reported that their job is interesting and 59 percent reported that their training is not being used effectively (See Table 5 for contrast with other groups).

III. Combat Targeting Team (CTT) Members. This group of 96 316X0G respondents accounts for 12 percent of the total sample. These group members primarily perform missile targeting and collimator set alignment functions (Duty N). Their primary tasks relate to the targeting of missile guidance and control (G and C) systems and the performance of limited maintenance tasks on targeting and G and C components. These tasks include performing missile CSD code changes, performing collimator checkouts, and aligning collimators of Wing I, II, or IV systems.

FIGURE I  
MINUTEMAN MISSILE ELECTRONIC MAINTENANCE CAREER LADDERS  
AFS's 316X0G, 316X2G, 316X2H



Two job types, based primarily on missile systems - with corresponding weapon system modifications - were identified within this functional area (See Appendix B). Tasks related to alignment and collimator maintenance distinguish the two job types. The first job type is comprised of CTT members who maintain the LGM-30F missile system at Wings I, II, and IV and who perform collimator checks and alignments. In contrast, members of the second job type maintain the LGM-30G missile system at Wings III, V, and VI and do not perform these alignment and maintenance tasks. For example, 100 percent of the LGM-30F job type report calculating reference mirror azimuths while none of the LGM-30G job type perform this task. Based on telephone conversations with HQ ATC and HQ SAC personnel, the implementation of the Command Data Buffer (CDB) system is the major cause of these CTT differences.

Of the three 316X0G functional areas identified thus far, CTT personnel report performing the narrowest job in terms of the average number of tasks performed (73 tasks). They also reported having the lowest job interest across all AFS 316X0G job groups (only 47 percent reported their jobs as at least fairly interesting). However, 59 percent responded that their training is being used fairly well or better. Seventy-six percent of the members of this cluster are in their first enlistment.

In performing their job, more than 60 percent of these members operate Standard (Category III) and Systems (Category II) test equipment.

IV. Technical Engineering and Analysis Technicians (TEATs). Approximately two percent of all respondents are represented by these 16 group members. These incumbents are 7- and 9-skill level personnel who troubleshoot and resolve system malfunctions which can not be resolved by established procedures. Tasks performed by these respondents involved all missile systems and all weapon systems - at all modification phases. These respondents are the most technically experienced personnel in AFS 316X0G - averaging 153 months in the service and reporting some use of almost all the equipment listed in the job inventory.

These members reported the highest job interest (81 percent responded that their job is interesting) and the most positive training utilization (87 percent reporting their training is being used fairly well or better). None of the members in this group have less than 97 months time in service.

V. AFS 316X2G Missile Electronic Equipment Specialists (MEES). These 30 Electronics Laboratory (E-Lab) personnel represent four percent of the total sample. All hold DAFSC 316X2G and comprise 73 percent of all DAFSC 316X2G respondents. More than 25 percent of their job time is spent performing functional checks, performing self tests, and isolating malfunctions on WS-133A, WS-133A-M, and WS-133AM/CDB equipment. The largest percentage of the respondents' job

time (22 percent) is spent on tasks associated with repairing and servicing missile electronic equipment (Duty V). Tasks specifically related to WS-133AM weapon systems and to Voice Reporting Signal Assemblies (VRSA) distinguish 316X2G respondents from respondents in the next independent job type (VI) who maintain WS-133B systems-related electronic equipment. Approximately 97 percent of these respondents reported being assigned to the LGM-30F missile system. Fifty percent of the members are in their first enlistment.

Generally, incumbents in this independent job type perform the broadest job (averaging 201 tasks) of all job groups identified in this survey. Job interest is somewhat high among these members, with 77 percent also indicating that their training is being used effectively (See Table 5).

VI. AFS 316X2H Missile Electronic Equipment Specialists (MEES). Representing only one percent the total sample, all eight of these AFS 316X2H "E-Lab" respondents reported maintaining WS-133B weapon system equipment. Common tasks relate to performing functional checks and self tests on, isolating malfunctions in, and calibrating and adjusting WS-133B electronic equipment. Performing self tests of, functional checks of, and calibrations or adjustments on AN/GSM-131, AN/GSM-139, and AN/GSM-145 equipment were done exclusively by this group.

The job performed by these incumbents, who averaged 178 tasks, is not as broad as the job performed by AFS 316X2G MEE specialists. Computer-associated tasks (predominantly relating to UNIVAC 1218 Digital Data Computers) and tasks relating to Command Data Buffer equipment distinguished these respondents from AFS 316X2G MEE specialists.

Members of this group reported that they are assigned primarily to Wings O, I, and VI - wings at which WS-133B systems maintenance requirements exist. Eighty-seven percent of this group responded that their training is being used fairly well or better. Five of the eight members of this group reported they are in their first enlistment.

VII. Supervision and Support Personnel (AFSs 316X0G/316X2G/316X2H, 31693). Respondents in specialties 316X0G and 31693 dominated this cluster, which represents 18 percent of the total sample. This group and the TEAT group (IV) represent the most experienced respondents across all the specialties in this survey. These respondents provide the various management and training support required by personnel in these specialties. Representative job types within this cluster include Training Instructors, Supervisors (Staff and Field), Inspectors/ Evaluators, and Trainer Maintenance personnel. The Supervisors group includes Team Chiefs, Flight Chiefs, Section Chiefs, Field Supervisors, Branch and Division NCOICs, Superintendents, and MAJCOM-agency NCOICs. More complete descriptions of all groups are presented in Appendix B.

The individuals in this cluster reported performing an average of 68 tasks - most of which are associated with Duties A through E (supervisory and administrative-related duties). Incumbents in this cluster average 147 months in the service. Seventy-one percent reported their jobs as interesting, while 68 percent responded that their training is being used fairly well or better.

VIII. Maintenance Control Personnel (AFS 316X0G). The 83 respondents in this group accounted for ten percent of the total sample. Job groups identified in this functional area are Briefers/Debriefers, Weapon System Controllers (or Job Controllers), and Maintenance Schedulers. These respondents perform an average of only 25 tasks and perform the narrowest job of any group identified. These incumbents are primarily senior 5- and 7-skill level 316X0G personnel with an average of 89 months in the service (only 12 percent report being in their first enlistment). These group members reported high job interest, as did the TEATs and supervisor job groups. Seventy percent of these respondents reported their jobs as fairly interesting or better.

Compared to all other reported groups, these group members perform few tasks specific to missile system or weapon system equipment maintenance. Not more than 30 percent reported being assigned to a missile or weapon system. More than 87 percent of the job time of these respondents is spent performing tasks related to organizing and planning, directing and implementing, and performing administrative functions. More complete descriptions of the job types in this cluster are given in Appendix B.

#### Summary

Based on analysis of tasks, the eight functional areas described above appear to be distinct. The EMT, SSMT, and CTT respondents (those with DAFSC 316X0G) perform different maintenance tasks at the launch site while the AFS 316X2G and the AFS 316X2H Missile Electronic Equipment Specialists perform bench test tasks on WS-133 weapon systems. Maintenance Control members accomplish maintenance requirements with AFS 316X0G resources, and Supervision and Support - along with TEAT - respondents provide technical expertise and support to all technically oriented functional areas.

TABLE 4  
SELECTED BACKGROUND DATA ON CAREER LADDER FUNCTIONAL AREAS

	ELECTROMECHANICAL TEAMS		SITE SECURITY MAINT. TEAMS		COMBAT TARGETING TEAMS		TECHNICAL ENGINEERING AND ANALYSIS TEAMS		AFS 316X2G MEES		AFS 316X2H MEES		SUPERVISION AND SUPPORT		MAINTENANCE CONTROL	
AVERAGE NUMBER OF TASKS PERFORMED	187		105		73		154		201		178		68		25	
AVERAGE GRADE	3.9		3.7		3.7		6.3		4.2		4.0		6.1		4.8	
PERCENT MEMBERS WHO SUPERVISE	25%		28%		4%		19%		37%		13%		56%		27%	
AVERAGE TIME IN PRESENT JOB	18.1 MOS		16.7 MOS		14.0 MOS		22.9 MOS		26.2 MOS		20.4 MOS		16.3 MOS		16.8 MOS	
AVERAGE TIME IN SERVICE	49.0 MOS		40.6 MOS		41.2 MOS		153.0 MOS		60.4 MOS		53.1 MOS		146.6 MOS		88.9 MOS	
PERCENT MEMBERS IN FIRST ENLISTMENT	68%		80%		76%		0		50%		63%		4%		12%	
DAFSC 31630G	13%		13%		23%		-		-		-		1%		-	
DAFSC 31650G	71%		77%		68%		-		-		-		12%		55%	
DAFSC 31670G	16%		10%		8%		75%		-		-		69%		45%	
DAFSC 31632G	-		-		-		-		6%		-		-		-	
DAFSC 31652G	-		-		-		-		77%		-		1%		-	
DAFSC 31672G	-		-		-		-		17%		-		6%		-	
DAFSC 31632H	-		-		-		-		-		-		-		-	
DAFSC 31652H	-		-		-		-		-		13%		-		-	
DAFSC 31672H	-		-		-		-		-		13%		-		-	
DAFSC 31693	-		-		1%		25%		-		-		10%		-	
NO RESPONSE	-		-		-		-		-		-		-		1%	

DASH = LESS THAN ONE PERCENT

TABLE 5

RESPONSES RELATING TO JOB SATISFACTION BY CAREER LADDER FUNCTIONAL AREA GROUPS  
(BY PERCENT MEMBERS RESPONDING)

	ELECTROMECHANICAL		SITE SECURITY		COMBAT TARGETING		TECHNICAL ENGINEERING		AFS 316X20		AFS 316X2H		SUPERVISION		MAINTENANCE	
	TEAMS		MAINT. TEAMS		TEAMS		AND ANALYSIS TEAMS		MEES		MEES		AND SUPPORT		CONTROL	
<u>I FIND MY JOB</u>																
DULL	17		14		22		6		17		13		12		7	
50-50	23		22		29		7		13		12		10		17	
INTERESTING	56		61		47		81		50		63		71		70	
NO RESPONSE	4		3		2		6		20		12		7		6	
<u>MY JOB USES MY</u>																
<u>TRAINING</u>																
VERY LITTLE OR NOT																
AT ALL	22		59		39		13		23		13		31		36	
FAIRLY WELL TO																
PERFECTLY	76		39		59		87		77		87		68		63	
NO RESPONSE	2		2		2		-		-		-		1		1	
<u>MY JOB USES MY</u>																
<u>TALENTS</u>																
VERY LITTLE OR NOT																
AT ALL	39		43		50		6		33		25		18		31	
FAIRLY WELL TO																
PERFECTLY	59		57		49		94		67		75		79		68	
NO RESPONSE	2		0		1		0		0		0		3		1	
<u>PLANS TO REENLIST</u>																
NO, OR PROBABLY NO	58		59		54		25		50		50		31		25	
YES, OR PROBABLY YES	39		35		42		75		40		50		66		71	
NO RESPONSE	3		6		4		0		10		0		3		4	

## ANALYSIS OF TASK AND JOB DIFFICULTY

From a listing of airmen identified to be surveyed in Air Force Specialties 316X0G, 316X2G, and 316X2H, incumbents at the 7- and 9-skill levels in each AFS and from representative locations were selected to rate task difficulty. Tasks were rated on a nine-point scale from extremely low to extremely high difficulty, with difficulty defined as the length of time it takes an average incumbent to learn to do the task. Interrater reliability (as assessed through components of variance of standardized group means) among the 74 raters whose responses were used was .91. Ratings were adjusted so that tasks of average difficulty have ratings of 5.00.

Table 6 presents a representative listing of tasks rated as having above average difficulty. In several cases, the majority of tasks in specific duties were rated as above average in difficulty. For example, all tasks related to performing trainer operation functions (Duty F) and performing trainer maintenance (Duty G) were given a higher than average difficulty rating. In addition, large numbers of tasks pertaining to maintaining missile facility electrical power systems (Duty K) and tasks relating to maintaining and checking, WS-133 systems, and electronic equipment (Duties O through U) were also rated above average. Of these, tasks related to isolating malfunctions in WS-133B electronic equipment (Duty T) and calibrating and adjusting WS-133B Electronic equipment (Duty U) were consistently rated as more difficult.

A representative listing of tasks rated below average in difficulty is provided in Table 7. Tasks related to maintaining WS-133 launch facilities and launch control facilities, LGM-30 missile systems, missile facility environmental control systems, and missile control and monitoring electronic systems, (Duties I, J, L, and M) and performing missile targeting and collimator set alignment functions (Duty N) were generally rated below average in difficulty. Tasks involving repairing and servicing missile electronic equipment (Duty V) were consistently rated below average. Other tasks having a low difficulty rating are those dealing with general shop maintenance (Duty W) and maintenance administration functions (Duty E). Likewise, most of the tasks in Duty B, Directing and Implementing, and Duty C, Inspecting and Evaluating, were rated as having low difficulty.

### Job Difficulty Index (JDI)

Besides reviewing the relative difficulty of tasks, it seems useful to look at the relative difficulty of the jobs. To obtain a relative Job Difficulty Index (JDI), the task difficulty ratings for the tasks performed and the time spent on those tasks (by specified job groups) were entered into a statistically reliable formula which predicts overall job difficulty. The resultant JDIs provide a relative measure of which jobs are more or less difficult when compared to other jobs identified in

the sample. The index ranks jobs on a scale of one (for very easy jobs) to 25 (for very difficult jobs). The indices are then adjusted so that the average JDI is 13.00. Individual JDIs were computed for each specialty and for the major job groups identified in the CAREER LADDER STRUCTURE section of this report. These indices are listed in Table 8.

Overall, it was found that the jobs performed by the Missile Electronic Equipment Specialists (316X2G and 316X2H) and the Technical Engineering Analysis Technicians (316X0G) have the highest computed job difficulty. Since tasks performed by these group members were consistently rated above average in difficulty, this appears logical. The least difficult jobs identified are those dealing with maintenance control, combat targeting, and site security maintenance, all 316X0G jobs. A review of tasks performed by these group members showed that most of these tasks were rated below average in difficulty.

TABLE 6

## TASKS RATED ABOVE AVERAGE IN DIFFICULTY

TASK	TASK DIFFICULTY INDEX	AFS 316XXG/H PERCENT MEMBERS PERFORMING (N=827)
G13 ISOLATE MALFUNCTIONS OF AN/GSQ-T28 OR AN/GSQ-T29 CMPT	8.06	2
G8 ISOLATE MALFUNCTIONS OF AN/GSQ-T9 (AM PORTION) LF TRAINERS	7.69	1
A10 DEVELOP WEAPONS SYSTEMS ENGINEERING OR PROCEDURAL CHANGES	7.55	12
G12 ISOLATE MALFUNCTIONS OF AN/GSQ-T26 OR AN/GSQ-T27 CMPT	7.36	*
P27 ISOLATE MALFUNCTIONS IN R-1358/B/GSW-10 UHF RADIO SUBSYSTEMS	7.20	3
Q19 CALIBRATE OR ADJUST R-1358/B/GSW-10 UHF RADIO SUBSYSTEMS	7.14	2
T17 ISOLATE MALFUNCTIONS IN AN/GSM-235 ELECTRONIC SYSTEMS TEST SETS	7.09	*
U21 CALIBRATE OR ADJUST UNIVAC TYPE 1218 DIGITAL DATA COMPUTERS	6.93	*
T32 ISOLATE MALFUNCTIONS IN UNITS OF AN/GSM-139 MAINTENANCE GROUND EQUIPMENT TEST SETS	6.79	1
R8 ISOLATE MALFUNCTIONS IN AN/GSQ-96 CODE CHANGE VERIFIER SETS	6.65	6
S29 PERFORM FUNCTIONAL CHECKS OF C-617A SIGNAL DATA CONVERTER UNITS	6.52	3
G5 ISOLATE MALFUNCTIONS OF AN/DJW-27-T2 GC SECTION TRAINERS	6.40	1
M58 PERFORM SELF TEST FUNCTIONS OF WING 3 OR 5 SYSTEMS	6.22	11
D11 CONDUCT RESIDENT TECHNICAL TRAINING COURSE CLASSROOM TRAINING	6.02	6
F33 PERFORM FMT OPERATION OF AN/GSQ-T9 (AM PORTION) LF TRAINERS	5.94	1
P51 ISOLATE MALFUNCTIONS IN UNITS OF DIGITAL DATA GROUPS	5.79	12
Q22 CALIBRATE OR ADJUST TS-2088/GSW-4 VOICE REPORTING SIGNAL ASSEMBLY TEST SETS	5.60	3
O12 PERFORM FUNCTIONAL CHECKS OF AN/GJA-25C CONTROL GUIDANCE COUPLER UNITS	5.42	4
L63 REMOVE OR INSTALL ECS ON LF OF WING 6U OR 1-X SYSTEMS	5.20	2

\* INDICATES LESS THAN ONE PERCENT

TABLE 7

TASKS RATED BELOW AVERAGE IN DIFFICULTY

TASK	TASK DIFFICULTY INDEX	AFS 316XXG/H PERCENT MEMBERS PERFORMING (N=827)
J62 REMOVE OR INSTALL MISSILE RV COMPONENTS	4.84	1
K137 REMOVE OR INSTALL WING 1 LCF BATTERY CHARGER SET COMPONENTS	4.64	7
P21 ISOLATE MALFUNCTIONS IN EMP ANTENNA LIMITER/MIXERS	4.44	1
M75 REMOVE OR INSTALL LCF KEYING VARIABLE OF WING 6W SYSTEMS	4.26	3
O3 INSPECT AN/GSM-85 OR AN/GSM-94 CONNECTOR ADAPTER SETS	4.06	18
D1 ADMINISTER OR SCORE ORAL, WRITTEN, OR PERFORMANCE TESTS	3.84	14
V24 MIX BATTERY ELECTROLYTES	3.61	1
V21 LOAD OR UNLOAD TAPES ON TAPE READERS	3.39	22
H16 PERFORM OPERATIONAL CHECKS OF PORTABLE HOISTING EQUIPMENT	3.08	44
E44 TRANSPORT TECHNICAL EQUIPMENT TO USING OR SERVICING ACTIVITIES	2.89	12
H6 INSPECT OR INSTALL SAFETY DEVICES SUCH AS SAFETY BARRIERS, LANYARDS, OR PERSONNEL BELTS	2.55	60
V97 RESET OVERLOAD SWITCHES	2.21	24
H25 REMOVE OR INSTALL ELECTRICAL PLUG OR SNAP-IN COMPONENTS SUCH AS BULBS OR FUSES	2.05	63
I88 RAISE OR LOWER MISSILE MAINTENANCE EQUIPMENT INTO OR FROM LF	1.91	35
A4 ASSIGN SPONSORS FOR NEWLY ASSIGNED PERSONNEL	1.75	9

TABLE 8  
JOB DIFFICULTY INDICES FOR SPECIALTY AND CAREER LADDER GROUPS

GROUPS	JOB DIFFICULTY INDEX
CAREER LADDER JOB GROUPS	
I ELECTROMECHANICAL TEAMS (N=275)	16.8
II SITE SECURITY MAINTENANCE TEAMS (N=69)	11.2
III COMBAT TARGETING TEAMS (N=96)	9.5
IV TECHNICAL ENGINEERING ANALYSIS TECHNICIANS (N=16)	18.6
V AFS 316X2G MEES (N=30)	18.9
VI AFS 316X2H MEES (N=8)	19.2
VII SUPERVISION AND SUPPORT (N=145)	12.1
VIII MAINTENANCE CONTROL (N=83)	7.6
AIR FORCE SPECIALTY (AFS) GROUPS	
AFS 316X0G (N=752)	12.7
AFS 316X2G (N=41)	17.4
AFS 316X2H (N=10)	17.8
AFS 31693 (N=24)	14.1

## ANALYSIS OF DAFSC GROUPS

As an integral part of each occupational analysis, task and background data of DAFSC groups are examined. This section's purpose is to highlight skill level characteristics and differences while providing a basis for comparisons of skill level groups across specialties.

Table 9 presents the relative percent time spent on the various duties by 5- and 7-skill level groups within the 316X0G and 316X2G ladders. Within each specialty, 5-skill level members spend over 70 percent of their total job time on technical functions, while 7-skill level respondents spend approximately the same amount of time (69 percent) on supervisory, training, and administrative functions.

### Missile Systems Analysts (DAFSC 316X0G)

DAFSC 31650G personnel comprise the largest group in the overall sample (435 respondents). These members spend 73 percent of their time performing technical tasks pertaining to general missile maintenance, maintaining WS-133 launch and launch control facilities, and maintaining missile facility electrical power systems. Representative tasks are listed in Table 10. Tasks related to performing general shop maintenance, using launch facility-related equipment, and operating maintenance vehicles characterized the tasks performed by this group.

As discussed in the CAREER LADDER STRUCTURE section, and illustrated in Table 12, most of the 31650G respondents (48 percent) were found in the Electromechanical Team (EMT) Members cluster. Smaller percentages were also found as Security Site Maintenance Team (SSMT) Members, Combat Targeting Team (CTT) Members, and Maintenance Control personnel.

In contrast, most of the 240 DAFSC 31670G respondents are grouped into the Supervision and Support Personnel (41 percent), Electromechanical Team Member (18 percent), and Maintenance Control (15 percent) groups (See Table 12). An additional five percent of 7-skill level members were found in the Technical Engineering and Analysis Technicians (TEATs) group, a technically oriented job. Generally, DAFSC 31670G respondents spend 69 percent of their time performing supervisory, training, and administrative tasks, such as those listed in Table 11.

### Missile Electronic Equipment Specialists (DAFSC 316X2G)

DAFSC 31652G respondents (N=25) spend 82 percent of their job time performing technical tasks related to repairing and servicing missile electronic equipment, performing functional checks and self tests of WS-133AM systems-related electronic equipment, and isolating malfunctions in WS-133AM systems-related electronic equipment. Table 13

lists representative 5-skill level tasks. In contrast, the tasks performed by DAFSC 31672G personnel (See Table 14) are associated with supervision, training, and administrative tasks such as drafting correspondence, reviewing and recommending changes to technical orders, and supervising or training subordinates.

Once again, Table 12 supports this distinction by showing that over 90 percent of the DAFSC 31652G respondents are grouped in the technically oriented job of the 316X2G Missile Electronics Equipment Specialist (MEES) group, while most of the 7-skill level respondents are members of the Supervision and Support Personnel group.

#### Missile Electronic Maintenance Superintendents (DAFSC 31693)

The 24 DAFSC 31693 respondents primarily perform a supervisory and managerial job, spending 82 percent of their job time on supervisory related duties. Table 15 gives representative tasks performed by 9-skill level respondents, along with corresponding percentages of 7-skill level members performing the same tasks. Although 7- and 9-skill level respondents perform many of the same supervisory tasks, DAFSC 31693 personnel spend more time on these tasks.

As shown in Table 12, most DAFSC 31693 respondents are members of the Supervisory and Support personnel group. However, some are either members of the Combat Targeting Team (CTT) Members group or of the Technical Engineering and Analysis Technicians (TEATs) group.

#### Similarities and Differences Between 316X0G and 316X2G Specialties

During the analysis of the DAFSC groups, it was noted that certain duties and tasks are primarily performed by members of only one specialty. As reflected in Table 16, duties I through N are performed by 316X0G personnel, duties O through Q by 316X2G personnel, duties S through U by 316X2H members, and duties R and V by both 316X2G and H personnel. Tables I through III in Appendix C offer representative tasks for each specialty. This data, along with the data displayed in Table 12, clearly show the distinct differences between the specialties surveyed. Overlap in terms of tasks performed is at a minimum and implies distinct career specialties.

Task similarities were also identified across the 316X0G, and 316X2G and 316X2H specialties. Table 17 lists representative tasks performed by members in all three specialties. Tasks commonly performed by respondents in all three specialties are administrative, general missile maintenance, and general shop maintenance tasks.

### Summary

Based on tasks performed and time spent performing these tasks, there are clear differences between 5- and 7-skill level DAFSC respondents in each specialty surveyed. Superintendents in these specialties are primarily supervisors and managers but some 9-level personnel are involved in technical-oriented work (Combat Targeting Teams or Technical Engineering and Analysis Technicians). Also, the data reflect distinct differences in terms of tasks performed by each specialty, indicating the need for three distinct Air Force Specialties.

TABLE 9

PERCENT TIME SPENT IN DUTIES BY DAFSC GROUPS WITHIN SPECIALTIES

DUTY	316X06 DAFSCs 31650G 31670G (N=435) (N=240)		316X2G DAFSCs 31652G 31672G (N=25) (N=13)		316X2H DAFSCs 31652H 31672H (N=7)* (N=2)**	
<u>SUPERVISORY/TRAINING/ADMINISTRATIVE</u>						
A ORGANIZING AND PLANNING	6	18	2	16	3	18
B DIRECTING AND IMPLEMENTING	7	20	3	15	3	8
C INSPECTING AND EVALUATING	3	11	2	18	10	22
D TRAINING	4	7	2	6	2	3
E PERFORMING MAINTENANCE ADMINISTRATION FUNCTIONS	7	13	9	17	6	10
<u>TECHNICAL</u>						
F PERFORMING TRAINER OPERATION FUNCTIONS	*	*	0	0	0	0
G PERFORMING TRAINER MAINTENANCE	1	*	0	0	0	0
H PERFORMING GENERAL MISSILE MAINTENANCE	16	7	8	4	5	5
I MAINTAINING WS-133 LAUNCH FACILITIES (LF) AND LAUNCH CONTROL FACILITIES (LCF)	17	6	2	*	0	*
J MAINTAINING LGM-30 MISSILE SYSTEMS	5	2	2	0	*	*
K MAINTAINING MISSILE FACILITY ELECTRICAL POWER SYSTEMS	11	4	*	0	*	*
L MAINTAINING MISSILE FACILITY ENVIRONMENTAL CONTROL SYSTEMS (ECS)	3	1	*	*	*	0
M MAINTAINING MISSILE CONTROL AND MONITORING ELECTRONIC SYSTEMS	6	3	4	1	4	2
N PERFORMING MISSILE TARGETING AND COLLIMATOR SET ALIGNMENT FUNCTIONS	2	*	*	*	*	*
O PERFORMING FUNCTIONAL CHECKS AND SELF-TESTS OF WS-133A, WS-133A/M, AND WS-133A/H COMMAND DATA BUFFER (CDB) EQUIPMENT	1	*	13	6	4	2
P ISOLATING MALFUNCTIONS IN WS-133A, WS-133A/H, AND WS-133A/M CDB EQUIPMENT	*	*	11	4	3	2
Q CALIBRATING AND ADJUSTING WS-133A, WS-133A/M, AND WS-133A/H CDB ELECTRONIC EQUIPMENT	*	*	8	3	2	0
R MAINTAINING TEST EQUIPMENT COMMON TO WS-133 SYSTEMS	*	*	4	1	3	1
S PERFORMING FUNCTIONAL CHECKS AND SELF-TESTS OF WS-133B ELECTRONIC EQUIPMENT	*	*	1	*	13	5
T ISOLATING MALFUNCTIONS IN WS-133B ELECTRONIC EQUIPMENT	*	*	*	*	10	5
U CALIBRATING AND ADJUSTING WS-133B ELECTRONIC EQUIPMENT	*	*	*	*	7	3
V REPAIRING AND SERVICING MISSILE ELECTRONIC EQUIPMENT	4	2	22	6	18	8
W PERFORMING GENERAL SHOP MAINTENANCE	5	4	6	3	8	3

\* INDICATES LESS THAN ONE PERCENT.

\*\* DUE TO THE LOW NUMBER OF RESPONDENTS, DATA IS PRESENTED FOR INFORMATION ONLY.

TABLE 10

REPRESENTATIVE TASKS PERFORMED BY DAFSC 31650G RESPONDENTS  
(BY PERCENT MEMBERS PERFORMING, N=435)

TASKS	PERCENT PERFORMING
H6 INSPECT OR INSTALL SAFETY DEVICES SUCH AS SAFETY BARRIERS, LANYARDS, OR PERSONNEL BELTS	75
H25 REMOVE OR INSTALL ELECTRICAL PLUG OR SNAP-IN COMPONENTS SUCH AS BULBS OR FUSES	75
H10 OPERATE MAINTENANCE VEHICLES	73
H20 PERFORM PREVENTIVE MAINTENANCE ON HAND TOOLS OR SPECIAL TOOLS	71
I14 INSPECT LF TELESCOPING LADDERS	71
H14 PERFORM DISPATCH VEHICLE OR EQUIPMENT TURN-IN PROCEDURES	70
H17 PERFORM OPERATOR INSPECTIONS OF MAINTENANCE VEHICLES	69
H29 VISUALLY INSPECT AEROSPACE GROUND EQUIPMENT (AGE)	69
W16 REMOVE SNOW, ICE, OR DIRT FROM WORK SITES	66
H2 CLEAN MISSILE FACILITIES OR EQUIPMENT	66

TABLE 11

REPRESENTATIVE TASKS PERFORMED BY DAFSC 31670G RESPONDENTS  
(BY PERCENT MEMBERS PERFORMING, N=240)

TASKS	PERCENT PERFORMING
A40 PREPARE FOR INSPECTIONS	69
A8 DEVELOP OR IMPROVE WORK METHODS OR PROCEDURES	60
E16 LOCATE INFORMATION IN TECHNICAL OR SUPPLY PUBLICATIONS	54
A6 CONDUCT OR PARTICIPATE IN STAFF MEETINGS	53
W20 SWEEP, MOP, OR BUFF FLOORS	53
B33 PREPARE OR INDORSE AIRMAN PERFORMANCE REPORTS (APR)	50
B12 DRAFT CORRESPONDENCE	49
A1 ASSIGN OR COORDINATE ACTIVITIES OF MAINTENANCE SPECIALISTS	48
B27 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	48
B6 COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED PROBLEMS	48

TABLE 12

DISTRIBUTION OF DAFSC RESPONDENTS BY JOB GROUPS  
(PERCENT MEMBERS RESPONDING)

GROUP	DAFSC 31650G (N=435)	DAFSC 31670G (N=240)	DAFSC 31652G (N=25)	DAFSC 31672G (N=13)	DAFSC 31652H (N=7)	DAFSC 31672H (N=2)	DAFSC 31693 (N=24)
ELECTROMECHANICAL TEAM (EMT) MEMBERS	48	18	0	0	0	0	0
SITE SECURITY MAINTENANCE TEAM (SSMT) MEMBERS	12	3	0	0	0	0	0
COMBAT TARGETING TEAM (CTT) MEMBERS	15	3	0	0	0	0	33
TECHNICAL ENGINEERING AND ANALYSIS TECHNICIANS (TEATs)	0	5	0	0	0	0	16
AFS 316X2G, MISSILE ELECTRONIC EQUIPMENT SPECIALISTS (WEES)	0	0	92	38	0	0	0
AFS 316X2H, MISSILE ELECTRONIC EQUIPMENT SPECIALISTS (WEES)	0	0	0	0	86	50	0
SUPERVISION AND SUPPORT PERSONNEL	4	41	4	62	0	50	51
MAINTENANCE CONTROL PERSONNEL	11	15	0	0	0	0	0
NOT GROUPED*	10	15	4	0	14	0	0

\* THESE RESPONDENTS DID NOT GROUP INTO ANY OF THE MAJOR JOB GROUPS IDENTIFIED

TABLE 13

REPRESENTATIVE TASKS PERFORMED BY DAFSC 31652G RESPONDENTS  
(BY PERCENT MEMBERS PERFORMING, N=25)

TASKS	PERCENT PERFORMING
W1 CLEAN ELECTRONIC EQUIPMENT	92
V87 REMOVE OR INSTALL TAPES	92
V41 REMOVE OR INSTALL CIRCUIT CARDS	92
W20 SWEEP, MOP, OR BUFF FLOORS	88
046 PERFORM FUNCTIONAL CHECKS OF PP-3030/B/GSW-4, PP-3026/B/GSW-4, OR PP-3027/GSW-4 POWER SUPPLIES	88
054 PERFORM FUNCTIONAL CHECKS OF VOICE REPORTING SIGNAL ASSEMBLIES	88
P55 ISOLATE MALFUNCTIONS IN VRSA	84
Q28 CALIBRATE OR ADJUST UNITS OF AN/GSM-82 ELECTRONIC FACILITY BASE MAINTENANCE TEST EQUIPMENT	84
E16 LOCATE INFORMATION IN TECHNICAL OR SUPPLY PUBLICATIONS	80
V71 REMOVE OR INSTALL P-PLUGS ON MISSILE GUIDANCE SETS	76

TABLE 14

REPRESENTATIVE TASKS PERFORMED BY DAFSC 31672G RESPONDENTS  
(BY PERCENT MEMBERS PERFORMING, N=13)

TASKS	PERCENT PERFORMING
B12 DRAFT CORRESPONDENCE	100
C24 INSPECT WORK AREAS OR EQUIPMENT	92
A40 PREPARE FOR INSPECTIONS	92
E40 REVIEW TECHNICAL ORDERS (TO)	92
C35 REVIEW CORRESPONDENCE OR REPORTS	92
C5 EVALUATE COMPLIANCE WITH MAINTENANCE POLICIES OR PROCEDURES	85
B2 COMPILE INFORMATION FOR REPORTS OR STAFF STUDIES	85
A8 DEVELOP OR IMPROVE WORK METHODS OR PROCEDURES	85
B14 DRAFT RECOMMENDATIONS FOR CHANGES TO TECHNICAL PUBLICATIONS	85
B48 VALIDATE NEW MAINTENANCE PROCEDURES OR EQUIPMENT	85

TABLE 15

REPRESENTATIVE TASKS PERFORMED BY DAFSC 31693 RESPONDENTS WITH COMPARATIVE 7-SKILL LEVEL DATA  
(BY PERCENT MEMBERS PERFORMING, N=24)

TASKS	PERCENT PERFORMING BY DAFSC GROUPS			
	31693	31670G	31672G	31672H*
B12 DRAFT CORRESPONDENCE	88	49	100	50
A40 PREPARE FOR INSPECTIONS	88	69	92	100
A6 CONDUCT OR PARTICIPATE IN STAFF MEETINGS	79	52	77	100
A44 SCHEDULE LEAVES	79	30	69	50
A41 REVIEW PERSONNEL REQUIREMENTS	79	29	62	0
B5 COUNSEL SUBORDINATES ON JOB PROGRESSION OR CAREER DEVELOPMENT	75	45	62	50
A16 ESTABLISH UNIT OR SECTION TRAINING REQUIREMENTS	71	27	77	50
A8 DEVELOP OR IMPROVE WORK METHODS OR PROCEDURES	71	50	85	100
B25 INITIATE CORRECTIVE ACTIONS BASED ON INSPECTION REPORTS	71	45	62	50
A2 ASSIGN PERSONNEL TO DUTY POSITIONS	71	26	54	0

\* DATA PRESENTED FOR INFORMATION ONLY.

TABLE 16

PERCENT TIME SPENT IN DUTIES BY SPECIALTY AND SUPERINTENDENT GROUPS

DUTY	SPECIALTIES			
	316X0G (N=752)	316X2G (N=41)	316X2H (N=10)**	31693 (N=24)
<b>SUPERVISORY/TRAINING/ADMINISTRATIVE</b>				
A ORGANIZING AND PLANNING	9	6	6	28
B DIRECTING AND IMPLEMENTING	10	8	4	23
C INSPECTING AND EVALUATING	5	7	11	15
D TRAINING	5	4	2	5
E PERFORMING MAINTENANCE ADMINISTRATION FUNCTIONS	8	11	7	11
<b>TECHNICAL</b>				
F PERFORMING TRAINER OPERATION FUNCTIONS	*	*	0	*
G PERFORMING TRAINER MAINTENANCE	*	*	0	0
H PERFORMING GENERAL MISSILE MAINTENANCE	13	6	6	3
I MAINTAINING WS-133 LAUNCH FACILITIES (LF) AND LAUNCH CONTROL FACILITIES (LCF)	13	2	*	2
J MAINTAINING LGM-30 MISSILE SYSTEMS	4	1	*	*
K MAINTAINING MISSILE FACILITY ELECTRICAL POWER SYSTEMS	9	*	*	3
L MAINTAINING MISSILE FACILITY ENVIRONMENTAL CONTROL SYSTEMS (ECS)	3	*	*	*
M MAINTAINING MISSILE CONTROL AND MONITORING ELECTRONIC SYSTEMS	5	3	3	2
N PERFORMING MISSILE TARGETING AND COLLIMATOR SET ALIGNMENT FUNCTIONS	2	*	*	*
O PERFORMING FUNCTIONAL CHECKS AND SELF-TESTS OF WS-133A, WS-133A/M, AND WS-133A/M COMMAND DATA BUFFER (CDB) EQUIPMENT	*	11	3	*
P ISOLATING MALFUNCTIONS IN WS-133A, WS-133A/M, AND WS-133A/M CDB EQUIPMENT	*	8	3	1
Q CALIBRATING AND ADJUSTING WS-133A, WS-133A/M, AND WS-133A/M CDB ELECTRONIC EQUIPMENT	*	6	1	0
R MAINTAINING TEST EQUIPMENT COMMON TO WS-133 SYSTEMS	*	3	2	*
S PERFORMING FUNCTIONAL CHECKS AND SELF-TESTS OF WS-133B ELECTRONIC EQUIPMENT	*	*	12	0
T ISOLATING MALFUNCTIONS IN WS-133B ELECTRONIC EQUIPMENT	*	*	9	*
U CALIBRATING AND ADJUSTING WS-133B ELECTRONIC EQUIPMENT	*	*	6	0
V REPAIRING AND SERVICING MISSILE ELECTRONIC EQUIPMENT	4	16	16	*
W PERFORMING GENERAL SHOP MAINTENANCE	5	5	7	2

\* INDICATES LESS THAN ONE PERCENT.

\*\* DUE TO THE LOW NUMBER OF 316X2H RESPONDENTS, 316X2H DATA IS PRESENTED FOR INFORMATION ONLY.

TABLE 17

REPRESENTATIVE TASKS PERFORMED BY AFS 316X0G, AFS 316X2G, AND  
AFS 316X2H\* RESPONDENTS  
(PERCENT MEMBERS PERFORMING)

TASKS	316X0G	316X2G	316X2H*
E16 LOCATE INFORMATION IN TECHNICAL OR SUPPLY PUBLICATIONS	39	83	50
E42 TAG SERVICEABLE OR UNSERVICEABLE EQUIPMENT	31	73	50
H4 IDENTIFY OR REPORT CORROSION	63	32	50
H7 INSTALL SOLDERLESS CONNECTIONS	43	54	60
H11 OPERATE STANDARD (CATEGORY III) TEST EQUIPMENT	48	61	50
H12 OPERATE SYSTEMS (CATEGORY II) TEST EQUIPMENT	39	54	50
H25 REMOVE OR INSTALL ELECTRICAL PLUG OR SNAP-IN COMPONENTS SUCH AS BULBS OR FUSES	64	73	70
H29 VISUALLY INSPECT AEROSPACE GROUND EQUIPMENT (AGE)	59	54	30
W14 PAINT WALLS, FLOORS, OR CEILINGS	54	76	80
W16 REMOVE SNOW, ICE, OR DIRT FROM WORK SITES	57	39	40

\* AFS 316X2H DATA PRESENTED FOR INFORMATION ONLY.

## COMPARISONS OF SURVEY DATA WITH CAREER LADDER DOCUMENTS

### AFR 39-1 Specialty Descriptions

In conjunction with the review of skill level and specialty groups, the AFR 39-1 Specialty Descriptions were also reviewed. The survey data specifically addressed Minuteman system specialties (Suffixes G and H) while the AFR 39-1 Specialty Descriptions were broadly written to cover "across system" responsibilities. Generally, the specialty descriptions in AFR 39-1 cover all major functions performed by AFS 316X0G, 316X2G, 316X2H and 31693 incumbents. However, there is one area in both the 316X0 and the 316X2 descriptions that appears to require some updating in relation to suffix designation and assigned weapon system. The 316X0 and 316X2 definitions of the "G" suffix should probably include the WS-133AM/1 weapon system. The definition for the "H" suffix in the 316X2 specialty description appears to be somewhat outdated.

### Specialty Training Standard (STS)

The STSs for the 316X0G and 316X2G/H specialties were also examined in light of the survey data. Since a thorough analysis of each STS is quite detailed and is primarily used for review of training, the STS analysis will be included in the Training Addendum to this report.

## COMPARISON OF CURRENT SURVEY TO PREVIOUS SURVEYS

The results of this survey were compared to those of Occupational Survey Report (OSR) AFPT 90-316-063, October 1973, Missile Systems Analyst Career Ladder, AFSS 316X0G/H and to Occupational Survey Report (OSR) AFPT 90-316-102, August 1974, Missile Electronic Equipment Specialist Career Ladder, AFSS 316X2F/G/H/Q/T. By reviewing the career ladder structure identified in these reports, we are able to see if and how the career ladder structure has changed over time.

Missile Systems Analyst Career Ladder, AFSS 316X0G/H, 31690 (OSR, AFPT 90-316-063, dated 1 October 1973).

Both surveys reflect similar career ladder structures and include many of the same functionally oriented job groups. The only noteworthy difference concern the identification in this study of Site Security Maintenance Teams not identified previously. A comparison of 316X0G related job groups from this study and the previous study is provided below:

### Present Study

Electromechanical Team (EMT) Members  
Site Security Maintenance Team (SSMT)  
Members

Combat Targeting Team (CTT) Members  
Technical Engineering and Analysis  
Technicians (TEATs)

Supervision and Support Personnel

- Training Instructors
- Supervisors (Field and Staff)
- Inspectors/Evaluators
- Trainer Maintainers

Maintenance Control Personnel

- Briefers/Debriefers
- Weapon System Controllers
- Maintenance Scheduling

-----

### Previous (1973) Study

Electromechanical Teams

- - - -

Combat Targeting Team  
Technical Engineering  
Analysis Teams

Resident Course Instructors I and II  
Supervisors and Superintendents

-----

Missile Trainer Maintenance  
Technician

Briefers and Debriefers  
Job Control and Scheduling  
Technicians  
Maintenance Plans  
Missile Refurbishment  
Technician

Overall it appears that the functional structure of the 316X0G career ladder has changed little since the 1973 report. There has, however, been the introduction of one new job, that of site security maintenance.

Missile Electronic Equipment Specialist Career Ladder, AFSs 316X2F/  
G/H/Q/T, 31790 (OSR, AFPT 90-316-102, dated 1 August 1974).

The reporting methodology used in the previous survey precluded extensive survey-to-survey comparisons. The current survey more clearly defines the 316X2G and 316X2H specialties. Some general comparisons, however, were made. In both surveys, each specialty is weapon system specific. For example, AFS 316X2G respondents maintain WS-133AM systems-related equipment while AFS 316X2H respondents maintain WS-133B systems-related equipment. The AFS 316X2G incumbents continue to perform a relatively broader job (more tasks) while AFS 316X2H group members continue to perform a relatively more difficult job (i.e., more difficult tasks).

## DISCUSSION

Based on task and background data analyses, both the CAREER LADDER STRUCTURE and the ANALYSIS OF DAFSC GROUPS sections of this report tend to support the existing classification structure of the 316X0G, 316X2G, and 316X2H specialties. Survey respondents in each of these specialties reported performing specialty-specific tasks which are not being performed to any great extent by members in the other specialties.

One minor problem was identified during analysis as a result of comparing occupational survey data with information received from HQ ATC/TT and HQ SAC/LGBA. Although 12 percent of all 316X0G and 316X2G respondents reported that they worked on the WS-133A weapon system, telephone coordinations indicated that this weapon system is no longer in the operational inventory. Additionally, weapon systems presently in the inventory were specified as: WS-133AM (basic), WS-133AM/1, WS-133AM/CDB, and WS-133B/CDB. These data inconsistencies suggest the need for a review of the weapon system designations for the "G" and "H" suffixes on the Airman Classification Structure Chart and the AFR 39-1 Specialty Descriptions.

Finally, since Minuteman production ceased in December 1977 and since existing weapon and missile systems are forecast to remain "in place" while forecast modifications will refine existing systems, the functional areas identified in this report are expected to remain relatively stable.

APPENDIX A

GROUP ID NUMBER AND TITLE: GRP059 ELECTROMECHANICAL TEAM (EMT) MEMBERS

NUMBER IN GROUP: 275

PERCENT OF SAMPLE: 33%

MAJCOM DISTRIBUTION: SAC (99%), ATC (1%)

DAFSC DISTRIBUTION: 31630G (13%), 31650G (71%), 31670G (16%)

AVERAGE GRADE: 3.9

JOB DIFFICULTY INDEX: 16.8

AVERAGE TIME IN CAREER FIELD: 38.6 MOS.

AVERAGE TIME IN SERVICE: 49.0 MOS.

PERCENT MEMBERS IN FIRST ENLISTMENT: 68%

AMOUNT OF SUPERVISION: 25% SUPERVISE AN AVERAGE OF TWO SUBORDINATES

AVERAGE NUMBER OF TASKS PERFORMED: 187

GROUP DIFFERENTIATING TASKS:

TASKS

H8 ISOLATE MALFUNCTIONS USING FAULT DATA WORK READOUTS  
I19 INSPECT WASTE DISPOSAL SYSTEMS IN WING 1, 2, 3, 4, OR 5  
I113 REMOVE OR INSTALL WASTE DISPOSAL SUMP PUMPS  
K3 ISOLATE MALFUNCTIONS IN LCF STORAGE BATTERIES  
K64 PERFORM CELL-TO-CELL BATTERY VOLTAGE CHECKS

TIME SPENT ON DUTIES:

DUTY

AVERAGE TIME SPENT  
BY ALL MEMBERS

K	MAINTAINING MISSILE FACILITY ELECTRICAL POWER SYSTEMS	22
H	PERFORMING GENERAL MISSILE MAINTENANCE	16
I	MAINTAINING WS-133 LAUNCH FACILITIES (LF) AND LAUNCH CONTROL FACILITIES (LCF)	13
M	MAINTAINING MISSILE CONTROL AND MONITORING ELECTRONIC SYSTEMS	11
J	MAINTAINING LGM-30 MISSILE SYSTEMS	7

GROUP ID NUMBER AND TITLE: GRP148 SITE SECURITY MAINTENANCE TEAM (SSMT)  
MEMBERS

NUMBER IN GROUP: 69

PERCENT OF SAMPLE: 8%

MAJCOM DISTRIBUTION: SAC (100%)

DAFSC DISTRIBUTION: 31630G (13%), 31650G (77%), 31670G(10%)

AVERAGE GRADE: 3.7

JOB DIFFICULTY INDEX: 11.2

AVERAGE TIME IN CAREER FIELD: 30.1 MOS.

AVERAGE TIME IN SERVICE: 40.6 MOS.

PERCENT MEMBERS IN FIRST ENLISTMENT: 80%

AMOUNT OF SUPERVISION: 28% SUPERVISE AN AVERAGE OF THREE SUBORDINATES

AVERAGE NUMBER OF TASKS PERFORMED: 105

GROUP DIFFERENTIATING TASKS:

TASKS

I63 PERFORM LF SECONDARY DOOR LOCK COMBINATION CHANGES  
I66 PERFORM LF SECURITY SYSTEM CALIBRATION PROCEDURES  
I31 ISOLATE MALFUNCTIONS IN WING 2, 3, 4, or 5 TYPE OZ SECURITY SYSTEMS  
I25 ISOLATE MALFUNCTIONS IN SECONDARY DOORS  
I24 ISOLATE MALFUNCTIONS IN ELECTROMECHANICAL LINEAR ACTUATORS

TIME SPENT ON DUTIES:

DUTY

AVERAGE TIME SPENT  
BY ALL MEMBERS

I	MAINTAINING WS-133 LAUNCH FACILITIES (LF) AND LAUNCH CONTROL FACILITIES (LCF)	47
H	PERFORMING GENERAL MISSILE MAINTENANCE	19
V	REPAIRING AND SERVICING MISSILE ELECTRONIC EQUIPMENT	8
W	PERFORMING GENERAL SHOP MAINTENANCE	7

GROUP ID NUMBER AND TITLE: GRP064, COMBAT TARGETING TEAM (CTT) MEMBERS

NUMBER IN GROUP: 96

PERCENT OF SAMPLE: 12%

MAJCOM DISTRIBUTION: SAC (100%)

DAFSC DISTRIBUTION: 31630G (23%), 31650 (68%), 31670 (8%), 31693 (1%)

AVERAGE GRADE: 3.7

JOB DIFFICULTY INDEX: 9.5

AVERAGE TIME IN CAREER FIELD: 35.9 MOS.

AVERAGE TIME IN SERVICE: 41.2 MOS.

PERCENT MEMBERS IN FIRST ENLISTMENT: 76%

AMOUNT OF SUPERVISION: 4% SUPERVISE AN AVERAGE OF THREE SUBORDINATES

AVERAGE NUMBER OF TASKS PERFORMED: 73

GROUP DIFFERENTIATING TASKS:

TASKS

N16 PERFORM MISSILE CSD CODE CHANGES

N10 PERFORM COLLIMATOR CHECKOUTS

N3 CALCULATE REFERENCE MIRROR AZIMUTHS

N1 ALIGN COLLIMATORS OF WING 1, 2, OR 4 SYSTEMS

N5 DOWNGRADE COMPUTER MEMORY INFORMATION OF WING 1, 2, OR 4 SYSTEMS

TIME SPENT ON DUTIES:

DUTY

AVERAGE TIME SPENT  
BY ALL MEMBERS

H PERFORMING GENERAL MISSILE MAINTENANCE	23
I MAINTAINING WS-133 LAUNCH FACILITIES (LF) AND LAUNCH CONTROL FACILITIES (LCF)	18
N PERFORMING MISSILE TARGETING AND COLLIMATOR SET ALIGNMENT FUNCTIONS	16
W PERFORMING GENERAL SHOP MAINTENANCE	7
J MAINTAINING LGM-30 MISSILE SYSTEMS	7

GROUP ID NUMBER AND TITLE: GRP061, TECHNICAL ENGINEERING AND ANALYSIS  
TECHNICIANS (TEATs)

NUMBER IN GROUP: 16

PERCENT OF SAMPLE: 2%

MAJCOM DISTRIBUTION: SAC (94%), AFLC (6%)

DAFSC DISTRIBUTION: 31670G (75%), 31693 (25%)

AVERAGE GRADE: 6.3

JOB DIFFICULTY INDEX: 18.6

AVERAGE TIME IN CAREER FIELD: 141.3 MOS.

AVERAGE TIME IN SERVICE: 153.0 MOS.

PERCENT MEMBERS IN FIRST ENLISTMENT: NONE

AMOUNT OF SUPERVISION: 19% SUPERVISE AN AVERAGE OF ONE SUBORDINATE

AVERAGE NUMBER OF TASKS PERFORMED: 154

GROUP DIFFERENTIATING TASKS:

TASKS

B31 PERFORM TECHNICAL ENGINEERING DIVISION (TED) TEST EQUIPMENT  
EVALUATION OF MAINTENANCE PROBLEMS  
A5 CONDUCT ENGINEERING STUDIES  
A10 DEVELOP WEAPONS SYSTEMS ENGINEERING OR PROCEDURAL CHANGES  
B29 PERFORM FAILURE DATA ANALYSIS FOR MAINTENANCE PROBLEMS  
H21 READ OR INTERPRET LOGIC DIAGRAMS

TIME SPENT ON DUTIES:

DUTY

AVERAGE TIME SPENT  
BY ALL MEMBERS

A ORGANIZING AND PLANNING	13
B DIRECTING AND IMPLEMENTING	13
H PERFORMING GENERAL MISSILE MAINTENANCE	13
M MAINTAINING MISSILE CONTROL AND MONITORING ELECTRONIC SYSTEMS	12
E PERFORMING MAINTENANCE ADMINISTRATION FUNCTIONS	11

GROUP ID NUMBER AND TITLE: GRP097, AFS 316X2G, MISSILE ELECTRONIC EQUIPMENT  
SPECIALISTS (MEES)

NUMBER IN GROUP: 30

PERCENT OF SAMPLE: 4%

MAJCOM DISTRIBUTION: SAC (100%)

DAFSC DISTRIBUTION: 31632G (6%), 31652G (77%), 31672 (17%)

AVERAGE GRADE: 4.2

JOB DIFFICULTY INDEX: 18.9

AVERAGE TIME IN CAREER FIELD: 47.3 MOS.

AVERAGE TIME IN SERVICE: 60.4 MOS.

PERCENT MEMBERS IN FIRST ENLISTMENT: 50%

AMOUNT OF SUPERVISION: 37% SUPERVISE AN AVERAGE OF TWO SUBORDINATES

AVERAGE NUMBER OF TASKS PERFORMED: 201

GROUP DIFFERENTIATING TASKS:

TASKS

- O46 PERFORM FUNCTIONAL CHECKS OF PP-3030/B/GSW-4, PP-3026/B/GSW-4,  
OR PP-3027/GSW-4 POWER SUPPLIES
- V98 SAFETY-WIRE EQUIPMENT
- O54 PERFORM FUNCTIONAL CHECKS OF VOICE REPORTING SIGNAL ASSEMBLIES
- P25 ISOLATE MALFUNCTIONS IN PP-3030/GSW-4, PP-3030/B/GSW-4, OR  
PP-3027/GSW-4 POWER SUPPLIES
- P8 ISOLATE MALFUNCTIONS IN AN/GJM-28(C-91) PROGRAMMER FAULT LOCATOR  
TEST CENTER UNITS

TIME SPENT ON DUTIES:

<u>DUTY</u>	<u>AVERAGE TIME SPENT BY ALL MEMBERS</u>
V REPAIRING AND SERVICING MISSILE ELECTRONIC EQUIPMENT	22
O PERFORMING FUNCTIONAL CHECKS AND SELF-TESTS OF WS-133A, WS-133A/M, AND WS-133A/M COMMAND DATA BUFFER (CDB) EQUIPMENT	14
P ISOLATING MALFUNCTIONS IN WS-133A, WS-133A/M, AND WS-133A/M CDB EQUIPMENT	11
E PERFORMING MAINTENANCE ADMINISTRATION FUNCTIONS	9
Q CALIBRATING AND ADJUSTING WS-133A, WS-133A/M, AND WS-133A/M CDB ELECTRONIC EQUIPMENT	8

GROUP ID NUMBER AND TITLE: GRP125, AFS 316X2H, MISSILE ELECTRONIC EQUIPMENT  
SPECIALISTS (MEES)

NUMBER IN GROUP: 8

PERCENT OF SAMPLE: 1%

MAJCOM DISTRIBUTION: SAC (100%)

DAFSC DISTRIBUTION: 31632H (13%), 31652H (74%), 31672H (13%)

AVERAGE GRADE: 4.0

JOB DIFFICULTY INDEX: 19.2

AVERAGE TIME IN CAREER FIELD: 29.5 MOS.

AVERAGE TIME IN SERVICE: 53.1 MOS.

PERCENT MEMBERS IN FIRST ENLISTMENT: 63%

AMOUNT OF SUPERVISION: 13% SUPERVISE AN AVERAGE OF TWO PERSONNEL

AVERAGE NUMBER OF TASKS PERFORMED: 178

GROUP DIFFERENTIATING TASKS:

TASKS

S13 PERFORM FUNCTIONAL CHECKS OF AN/GSM-139 MAINTENANCE GROUND  
EQUIPMENT TEST SETS  
S47 PERFORM SELF-TESTS OF AN/GSM-145 MAINTENANCE GROUND EQUIPMENT  
TEST SETS  
T32 ISOLATE MALFUNCTIONS IN UNITS OF AN/GSM-139 MAINTENANCE GROUND  
EQUIPMENT TEST SETS  
T43 ISOLATE MALFUNCTIONS IN UNIVAC TYPE 1218 DIGITAL DATA COMPUTERS  
U17 CALIBRATE OR ADJUST UNITS OF AN/GSM-145 MAINTENANCE GROUND  
EQUIPMENT TEST SETS

TIME SPENT ON DUTIES:

<u>DUTY</u>	<u>AVERAGE TIME SPENT BY ALL MEMBERS</u>
V REPAIRING AND SERVICING MISSILE ELECTRONIC EQUIPMENT	20
S PERFORMING FUNCTIONAL CHECKS AND SELF-TESTS OF WS-133B ELECTRONIC EQUIPMENT	15
T ISOLATING MALFUNCTIONS IN WS-133B ELECTRONIC EQUIPMENT	11
W PERFORMING GENERAL SHOP MAINTENANCE	9
U CALIBRATING AND ADJUSTING WS-133B ELECTRONIC EQUIPMENT	8

GROUP ID NUMBER AND TITLE: GRP026, SUPERVISION AND SUPPORT PERSONNEL

NUMBER IN GROUP: 145

PERCENT OF SAMPLE: 18%

MAJCOM DISTRIBUTION: SAC (90%), ATC (8%), OTHER (2%)

DAFSC DISTRIBUTION: 316X0G (82%), 316X2G (6%), 316X2H (1%), 31693 (10%),  
NOT REPORTED (1%)

AVERAGE GRADE: 6.1

JOB DIFFICULTY INDEX: 12.1

AVERAGE TIME IN CAREER FIELD: 111.6 MOS.

AVERAGE TIME IN SERVICE: 146.6 MOS.

PERCENT MEMBERS IN FIRST ENLISTMENT: 4%

AMOUNT OF SUPERVISION: 56% SUPERVISE AN AVERAGE OF SIX SUBORDINATES

AVERAGE NUMBER OF TASKS PERFORMED: 68

GROUP DIFFERENTIATING TASKS:

TASKS

A40 PREPARE FOR INSPECTIONS

B12 DRAFT CORRESPONDENCE

A6 CONDUCT OR PARTICIPATE IN STAFF MEETINGS

B25 INITIATE CORRECTIVE ACTIONS BASED ON INSPECTION REPORTS

C35 REVIEW CORRESPONDENCE OR REPORTS

TIME SPENT ON DUTIES:

DUTY

AVERAGE TIME SPENT  
BY ALL MEMBERS

B DIRECTING AND IMPLEMENTING

23

A ORGANIZING AND PLANNING

21

C INSPECTING AND EVALUATING

17

E PERFORMING MAINTENANCE ADMINISTRATION FUNCTIONS

14

D TRAINING

11

GROUP ID NUMBER AND TITLE: GRP039, MAINTENANCE CONTROL PERSONNEL

NUMBER IN GROUP: 83

PERCENT OF SAMPLE: 10%

MAJCOM DISTRIBUTION: SAC (90%), ATC (8%), OTHER (2%)

DAFSC DISTRIBUTION: 31650G (55%), 31670G (45%)

AVERAGE GRADE: 4.8

JOB DIFFICULTY INDEX: 7.6

AVERAGE TIME IN CAREER FIELD: 72.1 MOS.

AVERAGE TIME IN SERVICE: 88.9 MOS.

PERCENT MEMBERS IN FIRST ENLISTMENT: 12%

AMOUNT OF SUPERVISION: 27% SUPERVISE AN AVERAGE OF TWO SUBORDINATES

AVERAGE NUMBER OF TASKS PERFORMED: 25

GROUP DIFFERENTIATING TASKS:

TASKS

- A1 ASSIGN OR COORDINATE ACTIVITIES OF MAINTENANCE SPECIALISTS
- B47 UPDATE OR ANNOTATE STATUS BOARDS
- B11 DISPATCH MAINTENANCE TECHNICIANS TO WORK AREAS
- A17 ESTABLISH WORK PRIORITIES
- E38 REVIEW OR UPDATE MAINTENANCE MANAGEMENT INFORMATION CONTROL  
SYSTEMS (MMICS) OUTPUT DATA

TIME SPENT ON DUTIES:

<u>DUTY</u>	<u>AVERAGE TIME SPENT BY ALL MEMBERS</u>
B DIRECTING AND IMPLEMENTING	37
A ORGANIZING AND PLANNING	31
E PERFORMING MAINTENANCE ADMINISTRATION FUNCTIONS	20
W PERFORMING GENERAL SHOP MAINTENANCE	6
C INSPECTING AND EVALUATING	3

APPENDIX B

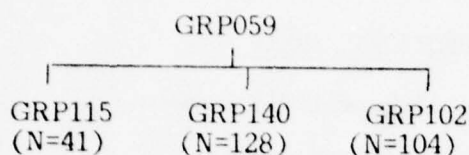
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# CONSOLIDATED CAREER LADDER TABLE

<u>JOB GROUPS WITHIN FUNCTIONAL AREAS</u>	<u>PERCENT OF SAMPLE</u>
I. Electromechanical Team (EMT) Members, (GRP059)	33%
- WS-133B/I, LGM-30G EMT (GRP115)	
- WS-133AM/AM-I, LGM-30F EMT (GRP140)	
- WS-133AM-1, LGM-30G EMT (GRP102)	
II. Site Security Maintenance Team Members (GRP148)	8%
III. Combat Targeting Team (CTT) Members (GRP064)	12%
- LGM-30F CTT (GRP149)	
- LGM-30G CTT (GRP080)	
IV. Technical Engineering and Analysis Technicians (TEATs) (GRP061)	2%
V. AFS 316X2G MEES (GRP097)	4%
VI. AFS 316X2H MEES (GRP125)	1%
VII. Supervision and Support Personnel (GRP026)	18%
- Training Instructors (GRP049)	
- Supervisors (Field/Staff) (GRP037)	
- Inspectors/Evaluators (GRP093)	
- Trainer Maintainers (GRP070)	
VIII. Maintenance Control Personnel (GRP039)	10%
- Briefers/Debriefers (GRP051)	
- Weapon System Controllers (GRP078)	
- Maintenance Schedulers (GRP066)	

# ELECTROMECHANICAL TEAM (EMT) MEMBERS (GRP059)



All EMT members reported performing tasks related to "on-site" maintenance of launch and launch control facilities. These three EMT groups were distinguished, primarily, by wing-specific tasks such as maintaining missile systems, environmental control systems, or missile control and monitoring electronic systems at Wings I-X and VI-W, at Wings I, II, and IV, or at Wings III and V. Further differences were based on the relative percent time spent on tasks in specific duties and on tasks related to the LGM-30F or the LGM-30G missile system.

WS-133B/I, LGM-30G EMT (GRP115). The 41 respondents in this group account for five percent of the sample and for 15 percent of EMT personnel who were identified in the analysis. These group members spend more of their time maintaining LGM-30 missile systems. More of these respondents reported maintaining URD-6409 power supply and battery charger sets than did members of the two other EMT groups. Three Wing-distinctive subgroups comprised this job type. Wing VI EMT members; Wing 0 EMT members assigned to the 394th ICBM Test Maintenance Squadron; and Wing I EMT members, team chiefs, and TTB instructors. Compared to the two other EMT job types, this group had the lowest percentage of first enlistment members (51%) and the highest percentage of personnel who reported that they intend to reenlist (56%). This group possessed the most experienced specialists, averaging 48.6 months in the career field.

WS-133AM/AM-I, LGM-30F EMT (GRP140). This group of 128 EMT personnel represents 15 percent of the total sample and 46 percent of all EMT identified during analysis. These respondents spend more than 13 percent of their job time performing maintenance tasks on missile control and monitoring electronic systems such as operationally checking guidance and control couplers and removing or installing launch facility site tailoring plugs. As with GRP102, these respondents reported they maintain VRSA equipment. This group has 67 percent of its members in their first enlistment and 65 percent said they probably will not reenlist. The majority of GRP115 and GRP140 respondents reported that they believed their training is being used at least fairly well. This group consists of respondents from Wings O, I, II, and IV with job titles reported as team members, team chiefs, TTB instructors, and QC Evaluators.

WS-133AM/I, LGM-30G EMT (GRP102). With this group of 104 members, 13 percent of the total sample and 39 percent of the EMT sample is represented. This job type is almost exclusively composed of Wings III and V personnel. These group members spend more time maintaining missile facility environmental control systems than do members of the two other EMT groups. Seventy-two percent of these respondents reported servicing environmental control brine systems. Approximately 76 percent of these members are in their first enlistment, and 36 percent reported they will probably reenlist. This group has the least experienced personnel, averaging 36 months in the career field and 44 months in the service. Job titles of group members includes team members, team chiefs, TTB instructors, and QC Evaluators.

GROUP ID NUMBER AND TITLE: GRP115, WS-133B/I, LGM-30G EMT

NUMBER IN GROUP: 41

PERCENT OF SAMPLE: 5%

MAJCOM DISTRIBUTION: SAC (95%), ATC (5%)

DAFSC DISTRIBUTION: 31630G (5%), 31650G (66%), 31670G (28%)

AVERAGE GRADE: 4.1

JOB DIFFICULTY INDEX: 17.3

AVERAGE TIME IN CAREER FIELD: 48.6 MOS.

AVERAGE TIME IN SERVICE: 61.5 MOS.

PERCENT MEMBERS IN FIRST ENLISTMENT: 51%

AMOUNT OF SUPERVISION: 23% SUPERVISE AN AVERAGE OF ONE SUBORDINATE

EXPRESSED JOB INTEREST: DULL (20%), SO-SO (22%), INTERESTING (58%),

PERCEIVED UTILIZATION OF TALENTS: LITTLE OR NOT AT ALL 37%  
FAIRLY WELL OR BETTER 63%

PERCEIVED UTILIZATION OF TRAINING: LITTLE OR NOT AT ALL 27%  
FAIRLY WELL OR BETTER 73%

AVERAGE NUMBER OF TASKS PERFORMED: 183

GROUP IDFFERENTIATING TASKS:

TASKS

K30 ISOLATE MALFUNCTIONS IN WING 6 OR 1-X LCF MOTOR GENERATORS  
J34 PERFORM MISSILE SYSTEMS TESTS  
M38 PERFORM CHECKOUTS OF MF RADIO EQUIPMENT  
J51 REMOVE OR INSTALL COMPONENTS OF LF URD-6409 POWER SUPPLY SETS

TIME SPENT ON DUTIES:

<u>DUTY</u>	<u>AVERAGE TIME SPENT BY ALL MEMBERS</u>
K MAINTAINING MISSILE FACILITY ELECTRICAL POWER SYSTEMS	20
H PERFORMING GENERAL MISSILE MAINTENANCE	16
I MAINTAINING WS-133 LAUNCH FACILITIES (LF) AND LAUNCH CONTROL FACILITIES (LCF)	15
J MAINTAINING LGM-30 MISSILE SYSTEMS	13

GROUP ID NUMBER AND TITLE: GRP140, WS-133AM/AM-I, LGM-30F EMT

NUMBER IN GROUP: 128

PERCENT OF SAMPLE: 15%

MAJCOM DISTRIBUTION: SAC (98%), OTHER (2%)

DAFSC DISTRIBUTION: 31630G (12%), 31650G (75%), 31670G (13%)

AVERAGE GRADE: 3.8

JOB DIFFICULTY INDEX: 16.6

AVERAGE TIME IN CAREER FIELD: 37.0 MOS.

AVERAGE TIME IN SERVICE: 48.8 MOS.

PERCENT MEMBERS IN FIRST ENLISTMENT: 67%

AMOUNT OF SUPERVISION: 26% SUPERVISE AN AVERAGE OF TWO SUBORDINATES

EXPRESSED JOB INTEREST: DULL (18%), SO-SO (21%), INTERESTING (57%),  
NOT REPORTED (1%)

PERCEIVED UTILIZATION OF TALENTS: LITTLE OR NOT AT ALL 38%  
FAIRLY WELL OR BETTER 61%  
NOT REPORTED 1%

PERCEIVED UTILIZATION OF TRAINING: LITTLE OR NOT AT ALL 19%  
FAIRLY WELL OR BETTER 80%  
NOT REPORTED 1%

AVERAGE NUMBER OF TASKS PERFORMED: 186

GROUP DIFFERENTIATING TASKS:

TASKS

K134 REMOVE OR INSTALL WING 1, 2, OR 4 LF MOTOR GENERATORS  
K120 PERFORM WING 1, 2, OR 4 POWER FAULT TO GROUND CHECKS  
M90 REMOVE OR INSTALL VOICE REPORTING SIGNAL ASSEMBLIES (VRSA)  
M79 REMOVE OR INSTALL LF SITE TAILORING PLUGS

TIME SPENT ON DUTIES:

DUTY

AVERAGE TIME SPENT  
BY ALL MEMBERS

K	MAINTAINING MISSILE FACILITY ELECTRICAL POWER SYSTEMS	22
H	PERFORMING GENERAL MISSILE MAINTENANCE	17
I	MAINTAINING WS-133 LAUNCH FACILITIES (LF) AND LAUNCH CONTROL FACILITIES (LCF)	14
M	MAINTAINING MISSILE CONTROL AND MONITORING ELECTRONIC SYSTEMS	13

GROUP ID NUMBER AND TITLE: GRP102, WS-133AM/1, LGM-30G EMT

NUMBER IN GROUP: 104

PERCENT OF SAMPLE: 13%

MAJCOM DISTRIBUTION: SAC (100%)

DAFSC DISTRIBUTION: 31630G (19%), 31650G (67%), 31670G (14%)

AVERAGE GRADE: 3.8

JOB DIFFICULTY INDEX: 16.9

AVERAGE TIME IN CAREER FIELD: 36 MOS

AVERAGE TIME IN SERVICE: 43.5 MOS

PERCENT MEMBERS IN FIRST ENLISTMENT: 76%

AMOUNT OF SUPERVISION: 25% SUPERVISE AN AVERAGE OF THREE SUBORDINATES

EXPRESSED JOB INTEREST: DULL (15%), SO-SO (26%), INTERESTING (53%),  
NOT REPORTED (6%)

PERCEIVED UTILIZATION OF TALENTS: LITTLE OR NOT AT ALL 43%  
FAIRLY WELL OR BETTER 54%  
NOT REPORTED 3%

PERCEIVED UTILIZATION OF TRAINING: LITTLE OR NOT AT ALL 25%  
FAIRLY WELL OR BETTER 71%  
NOT REPORTED 4%

AVERAGE NUMBER OF TASKS PERFORMED: 191

GROUP DIFFERENTIATING TASKS:

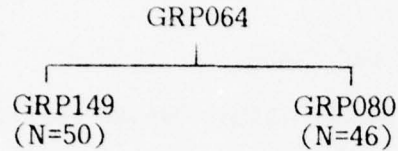
TASKS

L19 ISOLATE MALFUNCTIONS IN WING 3 OR 5 LCF ECS  
K24 ISOLATE MALFUNCTIONS IN WING 3 OR 5 LF DISTRIBUTION BOXES  
L71 SERVICE ENVIRONMENTAL CONTROL BRINE SYSTEMS  
L26 ISOLATE MALFUNCTIONS IN WING 3, 4, OR 5 LAUNCH CONTROL CENTER  
(LCC)/LAUNCH CONTROL EQUIPMENT BUILDING MONITOR PANELS

TIME SPENT ON DUTIES:

<u>DUTY</u>	<u>AVERAGE TIME SPENT BY ALL MEMBERS</u>
K MAINTAINING MISSILE FACILITY ELECTRICAL POWER SYSTEMS	21
H PERFORMING GENERAL MISSILE MAINTENANCE	16
I MAINTAINING WS-133 LAUNCH FACILITIES (LF) AND LAUNCH CONTROL FACILITIES (LCF)	13
L MAINTAINING MISSILE FACILITY ENVIRONMENTAL CONTROL SYSTEMS	10

## COMBAT TARGETING TEAMS (CTT)



LGM-30F CTT (GRP149). The 50 members of this group represent six percent of the survey sample and 52 percent of CTT respondents. Respondents represent Wings, I, II, and IV where WS-133AM/AM-I and LGM-30F systems are maintained. Compared to the LGM-30G CTT respondents (discussed below), this group is more experienced. The performance of tasks relating to collimator and alignment maintenance distinguishes this group from the other group. Although 66 percent of these respondents reported being in their first enlistment, 42 percent of the members responded they would or probably would reenlist. The use of azimuth alignment mirrors, theodolites, collimator test sets, and azimuth laying sets further distinguishes this group from LGM-30G CTT respondents.

LGM-30G CTT (GRP080). Representing 48 percent of CTT respondents, these 46 group members perform missile CSD code changes, downgrade computer memory information, inspect shock isolators, and perform colorimetric tests related to LGM-30G systems. These group members represent Wings III, V, and VI. The average time in service for these respondents is 34 months, with 87 percent of these incumbents in their first enlistment. Equipment distinguishing this group from LGM-30F respondents were digital voltmeters, magnetic tape units, and colorimetric gas detectors. Respondents with DAFSCs 31630G and 31650G accounted for 98 percent of this group's members.

GROUP ID NUMBER AND TITLE: GRP149, LGM-30F CTT

NUMBER IN GROUP: 50

PERCENT OF SAMPLE: 6%

MAJCOM DISTRIBUTION: SAC (100%)

DAFSC DISTRIBUTION: 31630G (22%), 31650G (62%), 31670G (14%), 31693 (2%)

AVERAGE GRADE: 4.0

JOB DIFFICULTY INDEX: 9.7

AVERAGE TIME IN CAREER FIELD: 41.7 MOS

AVERAGE TIME IN SERVICE: 48.1 MOS

PERCENT MEMBERS IN FIRST ENLISTMENT: 66%

AMOUNT OF SUPERVISION: 6% SUPERVISE AN AVERAGE OF THREE SUBORDINATES

EXPRESSED JOB INTEREST: DULL (24%), SO-SO (28%), INTERESTING (48%),

PERCEIVED UTILIZATION OF TALENTS: LITTLE OR NOT AT ALL 56%  
FAIRLY WELL OR BETTER 42%  
NOT REPORTED 2%

PERCEIVED UTILIZATION OF TRAINING: LITTLE OR NOT AT ALL 42%  
FAIRLY WELL OR BETTER 54%  
NOT REPORTED 4%

AVERAGE NUMBER OF TASKS PERFORMED: 72

GROUP DIFFERENTIATING TASKS:

TASKS

N3 CALCULATE REFERENCE MIRROR AZIMUTHS  
N8 MEASURE MISSILE CENTER LINE OFFSET  
N10 PERFORM COLLIMATOR CHECKOUTS  
N21 REMOVE OR INSTALL COLLIMATORS OR COLLIMATOR COMPONENTS  
N24 REMOVE OR INSTALL REFERENCE MIRRORS

TIME SPENT ON DUTIES:

<u>DUTY</u>	<u>AVERAGE TIME SPENT BY ALL MEMBERS</u>
N PERFORMING MISSILE TARGETING AND COLLIMATOR SET ALIGNMENT FUNCTIONS	26
H PERFORMING GENERAL MISSILE MAINTENANCE	20
I MAINTAINING WS-133 LAUNCH FACILITIES (LF) AND LAUNCH CONTROL FACILITIES (LCF)	14
W PERFORMING GENERAL SHOP MAINTENANCE	8
J MAINTAINING LGM-30 MISSILE SYSTEMS	7

GROUP ID NUMBER AND TITLE: GRP080, LGM-30G CTT

NUMBER IN GROUP: 46

PERCENT OF SAMPLE: 6%

MAJCOM DISTRIBUTION: SAC (100%)

DAFSC DISTRIBUTION: 31630G (24%), 31650G (74%), 31670G (2%)

AVERAGE GRADE: 3.4

JOB DIFFICULTY INDEX: 9.2

AVERAGE TIME IN CAREER FIELD: 29.6 MOS

AVERAGE TIME IN SERVICE: 33.7 MOS

PERCENT MEMBERS IN FIRST ENLISTMENT: 87%

AMOUNT OF SUPERVISION: ONE INDIVIDUAL SUPERVISES ONE OTHER INDIVIDUAL

EXPRESSED JOB INTEREST: DULL (20%), SO-SO (30%), INTERESTING (46%),  
NOT REPORTED (4%)

PERCEIVED UTILIZATION OF TALENTS: LITTLE OR NOT AT ALL 44%  
FAIRLY WELL OR BETTER 56%

PERCEIVED UTILIZATION OF TRAINING: LITTLE OR NOT AT ALL 35%  
FAIRLY WELL OR BETTER 65%

AVERAGE NUMBER OF TASKS PERFORMED: 75

GROUP DIFFERENTIATING TASKS:

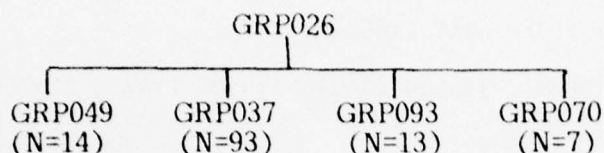
TASKS

H15 PERFORM OPERATIONAL CHECKS OF MAINTENANCE VEHICLE HOISTING  
EQUIPMENT  
I17 INSPECT SHOCK ISOLATORS  
I53 PERFORM COLORIMETRIC TESTS  
I109 REMOVE OR INSTALL PAS FOLDING LADDERS

TIME SPENT ON DUTIES:

<u>DUTY</u>	<u>AVERAGE TIME SPENT BY ALL MEMBERS</u>
H PERFORMING GENERAL MISSILE MAINTENANCE	27
I MAINTAINING WS-133 LAUNCH FACILITIES (LF) AND LAUNCH CONTROL FACILITIES (LCF)	22
J MAINTAINING LGM-30 MISSILE SYSTEMS	7
W PERFORMING GENERAL SHOP MAINTENANCE	6
M MAINTAINING MISSILE CONTROL AND MONITORING ELECTRONIC SYSTEMS	6

## SUPERVISION AND SUPPORT (GRP026)



Training Instructors (GRP049). These 14 respondents represent two percent of the survey sample. They are primarily ATC technical training instructors and SAC Training NCOs. Tasks such as administering tests, reviewing lesson plans, and conducting on-the-job training account for 37 percent of their job time. Most of these 5- and 7-skill level respondents reported that their jobs are interesting and use their training fairly well or better. Likewise, most stated they intend to reenlist.

Supervisors (Field/Staff) (GRP032). Representing 11 percent of the survey respondents, these 93 members spend 54 percent of their job time performing tasks related to organizing, planning, directing and implementing. Their levels of supervision range from flight chiefs to headquarters-level NCOICs while their areas of supervision include both operations (NCOIC EMT Branch) and support (NCOIC Data Management) functions.

Inspectors/Evaluators (GRP093). These 13 personnel account for two percent of the survey sample and represent all three specialties. Members of this group are headquarters staff and field inspectors who evaluate personnel performance, safety practices, and security policies. Approximately 37 percent of their job time is spent on inspection/evaluation tasks. All of these respondents report that their jobs use their training fairly well or better.

Trainer Maintenance Personnel (GRP070). Approximately 35 percent of these seven respondents' job time is spent maintaining 316X0G trainers. Forty-three percent of these members reported their jobs as interesting, while 57 percent responded that their jobs use their training fairly well or better. Two of the seven group members reported being in their first enlistment.

GROUP ID NUMBER AND TITLE: GRP049, TRAINING INSTRUCTORS

NUMBER IN GROUP: 14

PERCENT OF SAMPLE: 2%

MAJCOM DISTRIBUTION: SAC (64%), ATC (36%)

DAFSC DISTRIBUTION: 31650G (50%), 31670G (50%)

AVERAGE GRADE: 5.1

JOB DIFFICULTY INDEX: 9.4

AVERAGE TIME IN CAREER FIELD: 88.2 MOS

AVERAGE TIME IN SERVICE: 96.8 MOS

PERCENT MEMBERS IN FIRST ENLISTMENT: 11%

AMOUNT OF SUPERVISION: ONE INDIVIDUAL SUPERVISES SIX PERSONNEL

EXPRESSED JOB INTEREST: DULL (21%), SO-SO (14%), INTERESTING (58%),  
NOT REPORTED (7%)

PERCEIVED UTILIZATION OF TALENTS: LITTLE OR NOT AT ALL 14%  
FAIRLY WELL OR BETTER 86%

PERCEIVED UTILIZATION OF TRAINING: LITTLE OR NOT AT ALL 29%  
FAIRLY WELL OR BETTER 71%

AVERAGE NUMBER OF TASKS PERFORMED: 32

GROUP DIFFERENTIATING TASKS:

TASKS

D1 ADMINISTER OR SCORE ORAL, WRITTEN, OR PERFORMANCE TESTS  
D2 ARRANGE FOR TRAINING AIDS, SPACE, OR EQUIPMENT  
D17 DEVELOP OR REVIEW LESSON PLANS  
D36 PREPARE TRAINING MATERIALS  
D9 CONDUCT ON-THE-JOB TRAINING (OJT)

TIME SPENT ON DUTIES:

DUTY

AVERAGE TIME SPENT  
BY ALL MEMBERS

D TRAINING	37
A ORGANIZING AND PLANNING	17
B DIRECTING AND IMPLEMENTING	14
W PERFORMING GENERAL SHOP MAINTENANCE	10

GROUP ID NUMBER AND TITLE: GRP037, SUPERVISORS (FIELD/STAFF)

NUMBER IN GROUP: 93

PERCENT OF SAMPLE: 11%

MAJCOM DISTRIBUTION: SAC (89%), ATC (7%), OTHER (4%)

DAFSC DISTRIBUTION: 316X0G (77%), 316X2G(7%), 31693 (16%)

AVERAGE GRADE: 6.3

JOB DIFFICULTY INDEX: 12.5

AVERAGE TIME IN CAREER FIELD: 116.3 MOS

AVERAGE TIME IN SERVICE: 159.8 MOS

PERCENT MEMBERS IN FIRST ENLISTMENT: 1%

AMOUNT OF SUPERVISION: 76% SUPERVISE AN AVERAGE OF SIX SUBORDINATES

EXPRESSED JOB INTEREST: DULL (10%), SO-SO (9%), INTERESTING (74%),  
NOT REPORTED (7%)

PERCEIVED UTILIZATION OF TALENTS: LITTLE OR NOT AT ALL 19%  
FAIRLY WELL OR BETTER 77%  
NOT REPORTED 4%

PERCEIVED UTILIZATION OF TRAINING: LITTLE OR NOT AT ALL 34%  
FAIRLY WELL OR BETTER 65%  
NOT REPORTED 1%

AVERAGE NUMBER OF TASKS PERFORMED: 47

GROUP DIFFERENTIATING TASKS:

TASKS

A40 PREPARE FOR INSPECTIONS  
B12 DRAFT CORRESPONDENCE  
B33 PREPARE OR INDORSE AIRMAN PERFORMANCE REPORTS (APR)  
A6 CONDUCT OR PARTICIPATE IN STAFF MEETINGS  
C35 REVIEW CORRESPONDENCE OR REPORTS

TIME SPENT ON DUTIES:

DUTY

AVERAGE TIME SPENT  
BY ALL MEMBERS

B DIRECTING AND IMPLEMENTING	29
A ORGANIZING AND PLANNING	25
E PERFORMING MAINTENANCE ADMINISTRATION FUNCTIONS	17
C INSPECTING AND EVALUATING	14
D TRAINING	9

GROUP ID NUMBER AND TITLE: GRP093, INSPECTORS/EVALUATORS

NUMBER IN GROUP: 13

PERCENT OF SAMPLE: 2%

MAJCOM DISTRIBUTION: SAC (100%)

DAFSC DISTRIBUTION: 316X0G (70%), 316X2G (15%), 316X2H (15%)

AVERAGE GRADE: 6.0

JOB DIFFICULTY INDEX: 14.1

AVERAGE TIME IN CAREER FIELD: 102.0 MOS

AVERAGE TIME IN SERVICE: 131.3 MOS

PERCENT MEMBERS IN FIRST ENLISTMENT: 8%

AMOUNT OF SUPERVISION: 23% SUPERVISE AN AVERAGE OF ONE SUBORDINATE

EXPRESSED JOB INTEREST: DULL (8%), SO-SO (8%), INTERESTING (69%),  
NOT REPORTED (15%)

PERCEIVED UTILIZATION OF TALENTS: LITTLE OR NOT AT ALL 15%  
FAIRLY WELL OR BETTER 85%

PERCEIVED UTILIZATION OF TRAINING: FAIRLY WELL OR BETTER 100%

AVERAGE NUMBER OF TASKS PERFORMED: 73

GROUP DIFFERENTIATING TASKS:

TASKS

C5 EVALUATE COMPLIANCE WITH MAINTENANCE POLICIES OR PROCEDURES  
C11 EVALUATE PERSONNEL PERFORMING MAINTENANCE TASKS  
C14 EVALUATE SAFETY PRACTICES OR PROCEDURES  
A28 PARTICIPATE IN TECHNICAL ORDER POST-PUBLICATION REVIEWS  
B14 DRAFT RECOMMENDATIONS FOR CHANGES TO TECHNICAL PUBLICATIONS

TIME SPENT ON DUTIES:

<u>DUTY</u>	<u>AVERAGE TIME SPENT BY ALL MEMBERS</u>
C INSPECTING AND EVALUATING	37
A ORGANIZING AND PLANNING	24
B DIRECTING AND IMPLEMENTING	9
E PERFORMING MAINTENANCE ADMINISTRATION FUNCTIONS	8
D TRAINING	6

GROUP ID NUMBER AND TITLE: GRP070, TRAINER MAINTENANCE PERSONNEL

NUMBER IN GROUP: 7

PERCENT OF SAMPLE: 1%

MAJCOM DISTRIBUTION: SAC (100%)

DAFSC DISTRIBUTION: 31630G (14%), 31650G (43%), 31670G (43%)

AVERAGE GRADE: 4.9

JOB DIFFCULTY INDEX: 13.7

AVERAGE TIME IN CAREER FIELD: 69.4 MOS

AVERAGE TIME IN SERVICE: 86.6 MOS

PERCENT MEMBERS IN FIRST ENLISTMENT: 29%

AMOUNT OF SUPERVISION: 43% SUPERVISE AN AVERAGE OF ONE SUBORDINATE

EXPRESSED JOB INTEREST: DULL (29%), SO-SO (14%), INTERESTING (43%),  
NOT REPORTED (14%)

PERCEIVED UTILIZATION OF TALENTS: LITTLE OR NOT AT ALL 14%  
FAIRLY WELL OR BETTER 86%

PERCEIVED UTILIZATION OF TRAINING: LITTLE OR NOT AT ALL 43%  
FAIRLY WELL OR BETTER 57%

AVERAGE NUMBER OF TASKS PERFORMED: 81

GROUP DIFFERENTIATING TASKS:

TASKS

G14 ISOLATE MALFUNCTIONS OF AN/GSQ-T34 CMPT  
G29 PERFORM CHECKOUTS OF AN/GSQ-T28 OR AN/GSQ-T29 CMPT  
G63 PERFORM STARTUPS, SHUTDOWNS, OR INADVERTENT SHUTDOWNS OF AN/GSQ-T38  
ADAPTER SET PROCEDURES TRAINERS  
E10 INITIATE OR ANNOTATE MAINTENANCE DATA COLLECTION FORMS  
E42 TAG SERVICEABLE OR UNSERVICEABLE EQUIPMENT

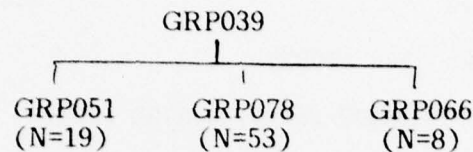
TIME SPENT ON DUTIES:

DUTY

AVERAGE TIME SPENT  
BY ALL MEMBERS

G	PERFORMING TRAINER MAINTENANCE	35
E	PERFORMING MAINTENANCE ADMINISTRATION FUNCTIONS	28
H	PERFORMING GENERAL MISSILE MAINTENANCE	11
W	PERFORMING GENERAL SHOP MAINTENANCE	7

## MAINTENANCE CONTROL PERSONNEL (GRP039)



This functional area is exclusively manned by 5- and 7-skill level AFS 316X0G respondents.

Briefers/Debriefers (GRP051). These 19 respondents perform an average of 14 tasks which are generally related to briefing and debriefing maintenance teams. Across all job groups in this survey, these respondents reported the least interesting job and the lowest utilization of their training. However, 63 percent of these members indicated that they would or probably would reenlist. First enlistment members account for 21 percent of this group's membership.

Weapon System Controllers (GRP078). Two primary subgroups identified within this group of 53 respondents (representing six percent of the survey sample) were dispatchers (N=11) and weapon system controllers (N=36). These respondents essentially implement the day to day scheduled activities of AFS 316X0G personnel. They perform such tasks as dispatch maintenance personnel to work areas, update status boards, and complete maintenance logs. All members in this group spend most of their time (71 percent) performing tasks related to Organizing and Planning (Duty A) and Directing and Implementing (Duty B). Five of these respondents indicated that they are in their first enlistment.

Maintenance Schedulers (GRP066). These eight respondents represent one percent of the sample. These scheduling personnel spend over 30 percent of their time planning and scheduling work assignments and assigning or coordinating activities of maintenance personnel. These respondents build the schedules which will be implemented by the controllers. They reported performing the narrowest job of any group in this survey, averaging only nine tasks. The average grade for these respondents is 4.8 while their average time in the service is 91 months.

GROUP ID NUMBER AND TITLE: GRP051, BRIEFERS/DEBRIEFERS

NUMBER IN GROUP: 19

PERCENT OF SAMPLE: 2%

MAJCOM DISTRIBUTION: SAC (100%)

DAFSC DISTRIBUTION: 31650G (68%), 31670G (32%)

AVERAGE GRADE: 4.9

JOB DIFFICULTY INDEX: 4.9

AVERAGE TIME IN CAREER FIELD: 77.4 MOS

AVERAGE TIME IN SERVICE: 96.2 MOS

PERCENT MEMBERS IN FIRST ENLISTMENT: 21%

AMOUNT OF SUPERVISION: 26% SUPERVISE AN AVERAGE OF THREE SUBORDINATES

EXPRESSED JOB INTEREST: DULL (21%), SO-SO (37%), INTERESTING (31%),  
NOT REPORTED (11%)

PERCEIVED UTILIZATION OF TALENTS: LITTLE OR NOT AT ALL 79%  
FAIRLY WELL OR BETTER 16%  
NOT REPORTED 5%

PERCEIVED UTILIZATION OF TRAINING: LITTLE OR NOT AT ALL 84%  
FAIRLY WELL OR BETTER 16%

AVERAGE NUMBER OF TASKS PERFORMED: 14

GROUP DIFFERENTIATING TASKS:

TASKS

B4 CONDUCT PRE-DISPATCH MAINTENANCE BRIEFINGS  
A35 PLAN, PREPARE, OR PRESENT BRIEFINGS  
A40 PREPARE FOR INSPECTIONS  
B47 UPDATE OR ANNOTATE STATUS BOARDS  
E34 REVIEW MAINTENANCE DATA COLLECTION FORMS

TIME SPENT ON DUTIES:

DUTY

AVERAGE TIME SPENT  
BY ALL MEMBERS

B DIRECTING AND IMPLEMENTING	31
E PERFORMING MAINTENANCE ADMINISTRATION FUNCTIONS	31
A ORGANIZING AND PLANNING	23
W PERFORMING GENERAL SHOP MAINTENANCE	12

GROUP ID NUMBER AND TITLE: GRP078, WEAPON SYSTEM CONTROLLERS

NUMBER IN GROUP: 53

PERCENT OF SAMPLE: 6%

MAJCOM DISTRIBUTION: SAC (100%)

DAFSC DISTRIBUTION: 31650G (51%), 31670G (49%)

AVERAGE GRADE: 4.8

JOB DIFFICULTY INDEX: 8.1

AVERAGE TIME IN CAREER FIELD: 71.6 MOS

AVERAGE TIME IN SERVICE: 85.6 MOS

PERCENT MEMBERS IN FIRST ENLISTMENT: 11%

AMOUNT OF SUPERVISION: 30% SUPERVISE AN AVERAGE OF TWO SUBORDINATES

EXPRESSED JOB INTEREST: DULL (2%), SO-SO (9%), INTERESTING (85%),  
NOT REPORTED (4%)

PERCEIVED UTILIZATION OF TALENTS: LITTLE OR NOT AT ALL 17%  
FAIRLY WELL OR BETTER 83%

PERCEIVED UTILIZATION OF TRAINING: LITTLE OR NOT AT ALL 19%  
FAIRLY WELL OR BETTER 79%  
NOT REPORTED 2%

AVERAGE NUMBER OF TASKS PERFORMED: 27

GROUP DIFFERENTIATING TASKS:

TASKS

B11 DISPATCH MAINTENANCE TECHNICIANS TO WORK AREAS  
B20 IMPLEMENT MAINTENANCE CONTROL WORK METHODS  
B47 UPDATE OR ANNOTATE STATUS BOARDS  
A17 ESTABLISH WORK PRIORITIES

TIME SPENT ON DUTIES:

DUTY

AVERAGE TIME SPENT  
BY ALL MEMBERS

B DIRECTING AND IMPLEMENTING	41
A ORGANIZING AND PLANNING	30
E PERFORMING MAINTENANCE ADMINISTRATION FUNCTIONS	18
W PERFORMING GENERAL SHOP MAINTENANCE	4

GROUP ID NUMBER AND TITLE: GRP066, MAINTENANCE SCHEDULERS

NUMBER IN GROUP: 8

PERCENT OF SAMPLE: 1%

MAJCOM DISTRIBUTION: SAC (100%)

DAFSC DISTRIBUTION: 31650G (50%), 31670G (50%)

AVERAGE GRADE: 4.8

JOB DIFFICULTY INDEX: 7.7

AVERAGE TIME IN CAREER FIELD: 62.4 MOS

AVERAGE TIME IN SERVICE: 91.0 MOS

PERCENT MEMBERS IN FIRST ENLISTMENT: NONE

AMOUNT OF SUPERVISION: ONE INDIVIDUAL SUPERVISES TWO PERSONNEL

EXPRESSED JOB INTEREST: DULL (13%), SO-SO (13%), INTERESTING (61%),  
NOT REPORTED (13%)

PERCEIVED UTILIZATION OF TALENTS: LITTLE OR NOT AT ALL 25%  
FAIRLY WELL OR BETTER 75%

PERCEIVED UTILIZATION OF TRAINING: LITTLE OR NOT AT ALL 38%  
FAIRLY WELL OR BETTER 62%

AVERAGE NUMBER OF TASKS PERFORMED: 9

GROUP DIFFERENTIATING TASKS:

TASKS

A17 ESTABLISH WORK PRIORITIES  
B34 PREPARE RECOMMENDATIONS FOR CHANGES IN EQUIPMENT OR PROCEDURES  
B35 PREPARE WEAPONS AUTHORIZATION SLIPS  
A45 SCHEDULE MISSILE MAINTENANCE INSPECTIONS

TIME SPENT ON DUTIES:

DUTY

AVERAGE TIME SPENT  
BY ALL MEMBERS

A ORGANIZING AND PLANNING	60
B DIRECTING AND IMPLEMENTING	25
E PERFORMING MAINTENANCE ADMINISTRATION FUNCTIONS	9
C INSPECTING AND EVALUATING	3

APPENDIX C  
DAFSC GROUPS AND AIR FORCE SPECIALTIES (AFSS)  
DATA TABLES

TABLE I

REPRESENTATIVE TASKS PERFORMED BY AFS 316X0G RESPONDENTS  
(PERCENT MEMBERS PERFORMING)

TASKS	316X0G	316X2G	316X2H*
H10 OPERATE MAINTENANCE VEHICLES	64	7	20
H17 PERFORM OPERATOR INSPECTIONS OF MAINTENANCE VEHICLES	61	7	10
H14 PERFORM DISPATCH VEHICLE OR EQUIPMENT TURN-IN PROCEDURES	60	7	0
I14 INSPECT LF TELESCOPING LADDERS	59	0	0
I15 INSPECT PAS SEALS, GASKETS, PRE-FORMED PACKING, OR HARDWARE	52	0	0
K1 ADD WATER TO OR REMOVE WATER FROM STORAGE BATTERIES	48	0	0
H1 ASSEMBLE OR CONFIGURE MAINTENANCE TEAM VEHICLES, EQUIPMENT, OR MATERIALS	45	0	0
I73 PERFORM OR PRACTICE EMERGENCY WAR ORDER (EWO) LF EVACUATION PROCEDURES	43	0	0
I88 RAISE OR LOWER MISSILE MAINTENANCE EQUIPMENT INTO OR FROM LF	38	0	0
I37 OPERATE OR PERFORM OPERATIONAL CHECKS OF ELEVATOR WORK CAGES	33	0	0

\* AFS 316X2H DATA PRESENTED FOR INFORMATION ONLY.

TABLE II

REPRESENTATIVE TASKS PERFORMED BY AFS 316X2G RESPONDENTS  
(PERCENT MEMBERS PERFORMING)

TASKS	316X0G	316X2G	316X2H*
P8 ISOLATE MALFUNCTIONS IN AN/GJM-28(C-91) PROGRAMMER FAULT			
LOCATOR TEST CENTER UNITS			
Q35 CALIBRATE OR ADJUST VRSA	1	71	0
Q25 PERFORM FUNCTIONAL CHECKS OF AN/GSM-159 OR AN/GSM-159B TEST	1	71	0
ADAPTER GROUPS UNITS			
Q15 PERFORM FUNCTIONAL CHECKS OF AN/GJO-28(C-91) PROGRAMMER FAULT	1	63	0
LOCATOR TEST CENTER UNITS			
Q44 PERFORM FUNCTIONAL CHECKS OF POWER AZIMUTH DRIVE CONTROLLERS	2	61	0
Q47 PERFORM FUNCTIONAL CHECKS OF PP-3267/GSM POWER SUPPLIES	1	61	0
P26 ISOLATE MALFUNCTIONS IN PP-3267/GSM POWER SUPPLIES	1	61	0
P39 ISOLATE MALFUNCTIONS IN POWER AZIMUTH DRIVE CONTROLLERS	1	61	0
Q18 CALIBRATE OR ADJUST PP-3030/B/GSW-4, PP-3026/B/GSW-4, OR PP-3027/GSW-4 POWER SUPPLIES	0	61	0
Q25 CALIBRATE OR ADJUST UNITS OF AN/GJM-28(C-91) PROGRAMMER FAULT	0	61	0
LOCATOR TEST CENTER UNITS			
	0	61	0

\* AFS 316X2H DATA PRESENTED FOR INFORMATION ONLY.

TABLE III

REPRESENTATIVE TASKS PERFORMED BY AFS 316X2H RESPONDENTS  
(PERCENT MEMBERS PERFORMING)

TASKS	316X0G	316X2G	316X2H
S13 PERFORM FUNCTIONAL CHECKS OF AN/GSM-139 MAINTENANCE GROUND EQUIPMENT TEST SETS	0	0	80
S44 PERFORM SELF-TESTS OF AN/GSM-131 POWER EQUIPMENT TEST SETS	0	0	80
S47 PERFORM SELF-TESTS OF AN/GSM-145 MAINTENANCE GROUND EQUIPMENT TEST SETS	0	0	80
T32 ISOLATE MALFUNCTIONS IN UNITS OF AN/GSM-139 MAINTENANCE GROUND EQUIPMENT TEST SETS	0	0	80
T33 ISOLATE MALFUNCTIONS IN UNITS OF AN/GSM-145 MAINTENANCE GROUND EQUIPMENT TEST SETS	0	0	80
U10 CALIBRATE OR ADJUST AN/GSM-131 POWER EQUIPMENT TEST SETS	0	0	80
U12 CALIBRATE OR ADJUST AN/GSM-136 POWER SUPPLY TEST SETS	0	0	80
U21 CALIBRATE OR ADJUST UNIVAC TYPE 1218 DIGITAL DATA COMPUTERS	0	0	80
S39 PERFORM FUNCTIONAL CHECKS OF RD-368/G ELECTRICAL PROCESSING RECORDER-REPRODUCER FOR W-133B CDB	0	2	70
T13 ISOLATE MALFUNCTIONS IN AN/GSM-136 POWER SUPPLY TEST SETS	0	0	70

NOTE: THIS TABLE PRESENTED FOR INFORMATION ONLY.